Part A : Institutional Information

NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING AND TECHNOLOGY

Mechanical Engineering

Part A : Institutional Information

1 Name and Address of the Institution

NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, 16-4-1/A NEW MALAKPET, HYDERABAD PIN:500024. TELANGANA STATE INDIA.

2 Name and Address of Affiliating University

OSMANIA UNIVERSITY HYDERABAD (From 2019-20 onwards) earlier JNTUH

3 Year of establishment of the Institution:

2008

4 Type of the Institution:

University	Autonomous
Deemed University	√ Affiliated
Government Aided	

5 Ownership Status:

Central Government	Trust
State Government	√ Society
Government Aided	Section 25 Company
√ Self financing	Any Other (Please Specify)

6 Other Academic Institutions of the Trust/Society/Company etc., if any:

Name of Institutions	Year of Establishment	Programs of Study	Location
Aizza College of Engineering and Technology	1999	BTECH MINING ENGG., CSE, EEE	Mulkala,Mancherial Adilabad district, Telangana

7 **Details of all the programs being offered by the institution under consideration:**

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
BE/B.TECH	UG	2008	2008	60	No	60	Applying first time	--	--	Yes	4
ME/M.TECH	PG	2012	2012	18	No	18	Eligible but not applied	--	--	No	2

8 **Programs to be considered for Accreditation vide this application:**

S No	Level	Discipline	Program
1	Under Graduate	Engineering & Technology	Civil Engg.
2	Under Graduate	Engineering & Technology	Computer Science & Engg.
3	Under Graduate	Engineering & Technology	Information Technology
4	Under Graduate	Engineering & Technology	Mechanical Engg.

9 **Total number of employees in the institution:**

A. **Regular* Employees (Faculty and Staff):**

Items	2021-22		2020-21		2019-20		2018-19		2017-18	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	98	98	93	93	7	7	7	7	5	5
Faculty in Engineering (Female)	36	36	35	35	5	5	5	5	5	5
Faculty in Maths, Science & Humanities (Male)	24	24	15	15	15	15	15	15	15	15
Faculty in Maths, Science & Humanities (FeMale)	16	16	13	13	19	19	19	19	19	19
Non-teaching staff (Male)	11	11	25	25	23	23	23	23	23	23
Non-teaching staff (FeMale)	5	5	2	2	1	1	1	1	1	1

B. **Contractual* Employees (Faculty and Staff):**

Items	2020-21		2019-20		2018-19		2017-18	
	MIN	MIN	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)								
Faculty in Engineering (Female)								
Faculty in Maths, Science &								

Humanities (Male)				
Faculty in Maths, Science & Humanities (FeMale)				
Non-teaching staff (Male)				
Non-teaching staff (FeMale)				

10 Total number of Engineering Students:

Engineering and Technology- UG	Shift1	Shift2
Engineering and Technology- PG	Shift1	Shift2
Engineering and Technology- Polytechnic	Shift1	Shift2
MBA	Shift1	Shift2
MCA	Shift1	Shift2

Engineering and Technology- UG Shift-1

Items	2021-22	2020-21	2019-20	2018-19	2017-18
Total no. of Boys	1510	1392	1342	1189	929
Total no. of Girls	140	134	110	92	66
Total	**1650**	**1526**	**1452**	**1281**	**995**

Engineering and Technology- PG Shift-1

Items	2021-22	2020-21	2019-20	2018-19	2017-18
Total no. of Boys	64	79	85	97	93
Total no. of Girls	24	32	34	26	20
Total	88	111	**119**	**123**	**113**

11 **Vision of the Institution:**

To impart quality technical education with strong ethics, producing technically sound engineers capable of serving the society and the nation in a responsible manner.

12 **Mission of the Institution:**

M1: To provide adequate knowledge encompassing strong technical concepts and soft skills thereby inculcating sound ethics.

M2: To provide a conducive environment to nurture creativity in teaching- learning process.

M3: To identify and provide facilities which create opportunities for deserving students of all communities to excel in their chosen fields.

M4: To strive and contribute to the needs of the society and the nation by applying advanced engineering and technical concepts.

13 **Contact Information of the Head of the Institution and NBA coordinator, if designated:**

Head of the Institution	
Name	Dr. Syed Abdul Sattar
Designation	PROFESSOR OF CSE AND PRINCIPAL
Mobile No.	7032580275
Email ID	nsakcet@gmail.com

NBA Coordinator, If Designated

Name	Dr. MOHAMMAD SANAULLAH QASEEM
Designation	PROFESSOR AND HOD CSE, IQAC COORDINATOR, NBA COORDINATOR
Mobile No.	9866879942
Email ID	ms_qaseem@yahoo.com

Part B MECH. ENGG DEPT

CRITERIA 1:
VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES

TOTAL MARKS 60.00

Part B

1 VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (60)

Total Marks 60.00

1.1 State the Vision and Mission of the Department and Institute (5)

Total Marks 5.00

Institute Marks : 5.00

Vision of the institute	To impart quality technical education with strong ethics, producing technically sound engineers capable of serving the society and the nation in a responsible manner.
Mission of the institute	**M1:** To provide adequate knowledge encompassing strong technical concepts and soft skills thereby inculcating sound ethics. **M2:** To provide a conducive environment to nurture creativity in teaching- learning process. **M3:** To identify and provide facilities which create opportunities for deserving students of all communities to excel in their chosen fields. **M4:** To strive and contribute to the needs of the society and the nation by applying advanced engineering and technical concepts.
Vision of the Department	To achieve excellence in Mechanical Engineering by imparting technical and professional skills along with ethical values to meet social needs via industrial requirements.
Mission of the Department	

M1	To offer quality education with the supportive facilities to produce efficient and capable engineers through industry institute interaction.
M2	To prepare the students with academic excellence, professional competence and ethical behavior for a lifelong learning.
M3	To inculcate moral and professional values among the students to cater the needs of the society and environment.

1.2 State the Program Educational Objectives (PEOs) (5)

Total Marks 5.00

Institute Marks : 5.00

PEO No.	Program Educational Objectives Statements
PEO1	Graduates will apply their engineering knowledge and problem solving skills to design mechanical systems and processes.
PEO2	Graduates will embrace leadership skills at various roles in their careers and establish excellence in the field of Mechanical Engineering.
PEO3	Graduates will provide engineering solutions to meet industrial requirements there by full fill societal needs.

1.3 Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders (10)

Total Marks 10.00

Institute Marks : 10.00

The department Vision, Mission and PEOs are displayed at the following locations

- College Website **(http://www.nsakcet.ac.in)**
- HOD chamber.
- Staff rooms.
- Course files.
- Lab manuals.
- All departmental laboratories.
- All department notice boards.
- Department library.
- Corridors of the department.

The Vision and Mission are disseminated during the conduction of:

- Workshops.
- Seminars.
- Conferences.
- Faculty development programs.
- Training programs for students.

The following platforms are used to disseminate the Vision, Mission and PEOs of the department among stake holders in order to educate them and to get their support inreaching out the goals.

- BOG Meetings – Management and BOG members.
- Induction program / Orientation program – Students and parents.
- Parent Teacher meeting – Parents.
- Campus recruitment drives – Employers, Industry.
- Alumni meet - Alumni.
- Symbolically through brochures, technical magazines, etc., sent from college.

- Faculty meetings - Faculty.
- Student awareness workshops - Students.
- Parent Teacher meeting – Parents.

The internal stakeholders of the program are:

- Students.
- Management.
- BOG members.
- Faculty.
- Support staff.
- Parents.
- The External Stakeholders of the program are:
- Alumni.
- Employers.
- Industry.
- Funding agencies.

Extent of Awareness of Vision, Mission & PEOs among stake holders:

BOG Meetings – Management and BOG members – BOG reviews the Vision, Mission statements of both institute and department and later PEOs of each program and reviews the progress in successive meetings.

Publishing at various places of the department - Faculty members, students and visitors will be aware of Vision, Mission and PEOs.

Induction program (Freshers) - Students and Parents: The head of the department will introduce the principles, objectives and culture of both institute and departmentthrough Vision, Mission and PEOs.

Parents and Teachers Meet – The head of the department and the concerned faculty members will address the activities initiated in the institute/department to achieve the objectives. Future course of action will be discussed.

Campus Recruitment Drives – The Vision and Mission of the institute & department and PEOs are distributed among the employers.

Alumni Meet – During the alumni meet, the opinions and suggestions from the alumni are collected and considered to improve the attainment.

Workshops and FDPs – The participants from other institutions get awareness on the Vision and Mission of the institute & the department and PEOs through oral presentation about the department.

1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program (25)

Total Marks 25.00

Institute Marks : 25.00

Description of process involve in defining the Vision of the department:

A bottom-up approach has been employed for the process of defining the departmental Vision and Mission statement. The departmental Vision and Mission statement has been developed in alignment with the institute's Vision and Mission with the active participation of department head, teaching faculty members and staff along with the continuous feedback from various stakeholders. The following procedure is followed in formulating the Vision and Mission of the department:

Step 1: Vision and Mission of the Institution are taken as basis.

Step 2: Views are taken from stakeholders of the department such as students, alumni, faculty members, employers and parents.

Step 3: The views about the departmental Vision and Mission are formulated by the team of teaching faculty members of the department and which are then shared among the external stake holders for feedback.

Step 4: Department Advisory Committee (DAC) reviews and approves the departmental Vision and Mission to check the consistency with the Vision and Mission of the institute.

Step 5 : The departmental Vision and Mission statements are then published.

Internal Stake holders

Management regularly reviews the programme objectives and improves on them.

Teaching faculty members frequently contribute to the evaluation process.

Non-teaching staff members provide the support for a successful teaching learning process.

Students observe the support derived from these objectives in their future careers.

External Stakeholders

Parents assist the department in implementing several measures that enable their wards to grow into well equipped, professionally qualified and responsible Mechanical engineers and citizens.

Alumni regularly rate the objectives and assess their relevance to the changing global needs.

Employers assess the applicability of the objectives while evaluating graduates for specific employment requirements during CRTs.

With the active participation of department head, Internal Quality Assessment Committee (IQAC) members, teaching faculty members and staff along with the continuous feedback from stakeholders, the Vision and Mission statement of the department was developed in alignment with Vision and Mission of the institute.

Process defining department Vision and Mission

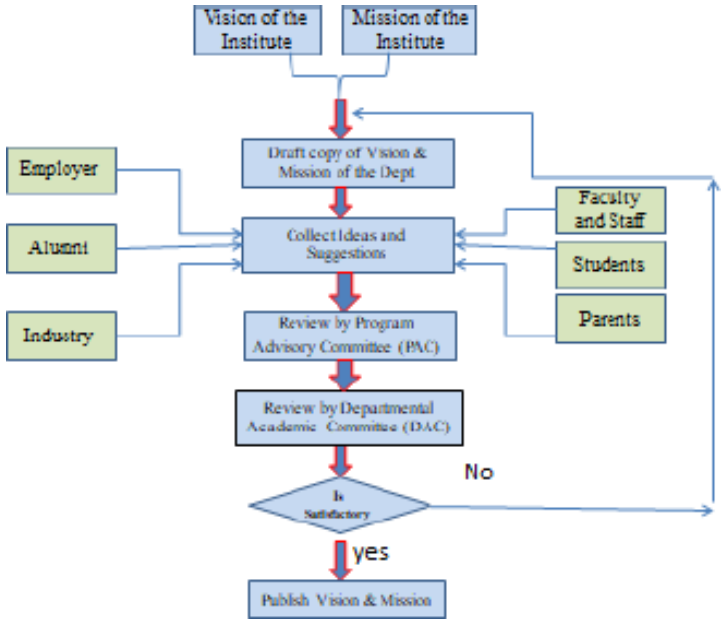


Figure 1.4.1 Process defining department Vision and Mission

Description of process involved in defining the PEOs of the program.

The Program Educational Objectives (PEOs) are established through a consultation process involving the stakeholders such as students, alumni, teaching faculty, employers and parents.

The PEOs are formulated through the following steps.

Step 1: The Institute's Vision and Mission statements are taken as basis.

Step 2: The departmental Vision and Mission are taken as a basis to interact with various stakeholders.

Step 3: The program coordinator collects the survey results of various stakeholders.

Step 4: On considering the views of the stakeholders, the PEOs are formulated by the team of senior faculty members identified for the program.

Step 5: The PEOs are represented before the program advisory committee for additional inputs to improvise the program.

Step 6: Finally, the department advisory committee approves the PEOs.

Step 7: PEOs of the department are published.

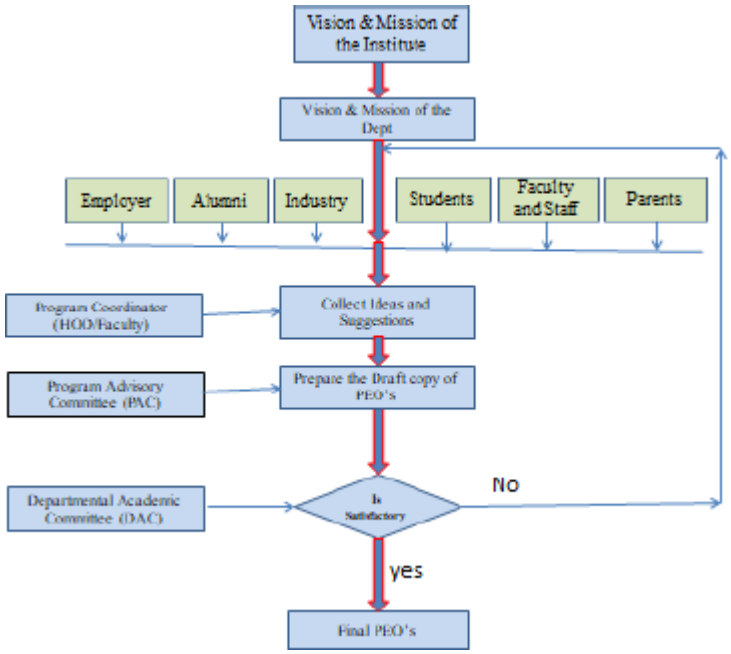


Figure 1.4.2. Process for defining the PEOs of the department

1.5 Establish consistency of PEOs with Mission of the Department (15)

Total Marks 15.00

Institute Marks : 15.00

To realize the departmental vision, various academic and extra-curricular activities will be organized. The goal of these activities will be to:

M1: To offer quality education with the supportive facilities to produce efficient and capable engineers through industry-institute interaction.

M2: To prepare the students with academic excellence, professional competence, and ethical behavior for a lifelong learning.

M3: To inculcate moral and professional values among the students to cater the needs of the society and environment.

In the following table the consistency of PEO's with Mission of the department is shown as matrix (Mission-PEO's). The relevance/correlation is assigned as following numerical weights: high correlation (3), medium correlation (2), low correlation (1) and no correlation (-).

The PEOs of the department are aimed to nurture professionals with strong fundamentals and core knowledge of their domain by providing a platform for learning and

acquiring technical skills and ethical approach in collaboration with industries and academic experts throughout the globe.

Mission of the department PEOs of the department	**M1**: To offer quality education with the supportive facilities to produce efficient and capable engineers through industry institute interaction.	**M2:** To prepare the students with academic excellence, professional competence, and ethical behavior for a lifelong learning.	**M3**: To inculcate moral and professional values among the students to cater the needs of the society and environment.
PEO1: Graduates will apply their engineering knowledge and problem solving skills to design mechanical systems and processes.	**3:** M1-is strongly concurrent with PEO1 as objective is to apply engineering knowledge which is possible by an efficient engineer.	**3:** M2-also strongly supports PEO1 by preparing students with academic excellence which can make them professionally competent.	**3:** M3- is strongly supportive to PEO1 by designing mechanical systems for the society and environmental needs.
PEO2: Graduates will embrace leadership skills at various roles in their careers and establish excellence in the field of mechanical engineering.	**3:** M1-is strongly concurrent with PEO2 as objective is to establish excellence in mechanical engineering field which is possible through industry and institute interaction.	**3:** M2-also strongly supports PEO2 by imparting leadership skills through lifelong learning.	**2:** M3-is moderately supportive to PEO2 by inculcating moral and professional values in the fields of mechanical engineering.
PEO3: Graduates will provide engineering solutions to meet industrial requirements there by fulfill societal needs.	**3:** M1-is strongly concurrent with PEO3 as objective is to provide engineering solutions by offering quality education.	**3:** M2-also strongly supports PEO3 as objective is to meet industrial requirements by academic excellence.	**3:** M3-is strongly supportive with PEO3 as objective is to meet industrial requirements to fulfill the needs of society and environment.

PEO Statements	**M1**	**M2**	**M3**
Graduates will apply their engineering knowledge and problem solving skills to design mechanical systems and processes.	3	3	3
Graduates will embrace leadership skills at various roles in their careers and establish excellence in the field of Mechanical Engineering.	3	3	2
Graduates will provide engineering solutions to meet industrial requirements there by full fill societal needs.	3	3	3

CRITERIA 2:

PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES TOTAL MARKS 120.00

2 PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES (120)

Total Marks 120.00

Program Curriculum (20)

State the process used to identify extent of compliance of the University curriculum for Attaining the Program Outcomes and Program Specific Outcomes as mentioned in Annexure I. Also mention the identified curricular gaps, if any (10)

CRITERION 2	**Program Curriculum and Teaching– Learning Processes**	**120**

State the process used to identify extent of compliance of the University curriculum for attaining the Program Outcomes and Program Specific Outcomes asmentioned in Annexure I. Also mention the identified curricular gaps, if any (10)

NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING AND TECHNOLOGY is affiliated to JNTU Hyderabad (CAY), Osmania University Hyderabad (Academic Year 2020- 2021) and curriculum is Designed by affiliated university (JNTU Hyderabad & Osmania University Hyderabad). The university curriculum has a composition of Basic Sciences, humanities and social Sciences, Professional core, Professional Electives Open Electives and Engineering Sciences.

Curriculum fulfillment is an organized analysis of the curriculum prescribed by the University to identify the degree of proficiency and content of the syllabi for the achievement of program Outcomes and program specific outcomes. In this view, the Departmental Academic Committee (DAC) is made.

The Departmental Academic Committee undertakes a study / investigation to determine whether the syllabi and its contents provides the opportunity to students to gain appropriate knowledge, Skills and attitude. This process helps to identify the gap between University curriculum and Program outcomes. Relevant courses are collected based on its contents and grouped them as modules.

Curriculum compliance is verified by organizing the information into a matrix (course-PO matrix) which maps each one to the other. Mapping involves making collective judgments', by Departmental Academic Committee, about the link between the course outcomes (COs) and the program outcomes (POs). The same process is extended to course-PSOs matrix. Curricular Gaps are also identified by mapping.

Process used to identify extent of compliance of university curriculum for attaining POs & PSOs (6)Process:

a. The mapping of COs to POs and PSOs which in turn computes the average POs and PSOs correlation for each course is prepared by the faculty and verified by the Department Academic Committee.
b. Based on the suggestions provided by the faculty on curricular gap of courses, the Departmental Academic Committee evaluates the improvement in the attainment of POs and PSOs, considering PEOs, Vision and Mission statements.
c. The delivery plan is prepared by the faculty for the course related curricular gap and Seminars/workshops are planned by the department.
d. Average correlation of Program Outcome attainments of 3 Academic Years (2019-20,2018-19, 2017-18) of each subject have been calculated carefully and presented in Criteria 3.

Based on the Program Outcome attainment values the curricular gaps are identified.

Program Outcome: List of POs

PO1	**Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems in Mechanical Engineering
PO2	**Problem analysis**: Identify, formulate, research literature, and analyze complex Mechanical Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	**Design/development of solutions:** Design solutions for complex Mechanical Engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	**Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions in Mechanical Engineering.
PO5	**Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex Mechanical Engineering activities with an understanding of the limitations.
PO6	**The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional Mechanical Engineering practice.
PO7	**Environment and sustainability:** Understand the impact of the professional Mechanical Engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the Mechanical Engineering practice.
PO9	**Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings in Mechanical Engineering.
PO10	**Communication:** Communicate effectively on complex Mechanical Engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	**Project management and finance:** Demonstrate knowledge and understanding of the Mechanical Engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	**Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change in Mechanical Engineering.

Program Specific Outcomes (PSO):

PSO1	Implement new ideas on product design and development with the help of modern computer aided tools, while ensuring best manufacturing practices
PSO2	Develop innovative attitude, critical thinking and problem-solving approach for any domains of mechanical engineering.
PSO3	Impart technical knowledge, ethical values and managerial skills to make successful in career.

B. List the curricular gaps for the attainment of defined POs & PSOs (4)

Process used to identify the curricular Gaps:

The course curriculum is reviewed by a Departmental Academic Committee on a regular basis for fulfillment of the PO/PSOs, Course Outcomes. Feedbacks from the concerned Faculty, Alumni, and Industry experts are taken with utmost importance and GAPs are identified.
During the process that few of the components to attain the program Outcomes, are not included in the curriculum prescribed, then the Committee recommends the additionalcontents to be covered under THE SYLLABUS for each of the Courses.

The following flowcharts represent the process followed.

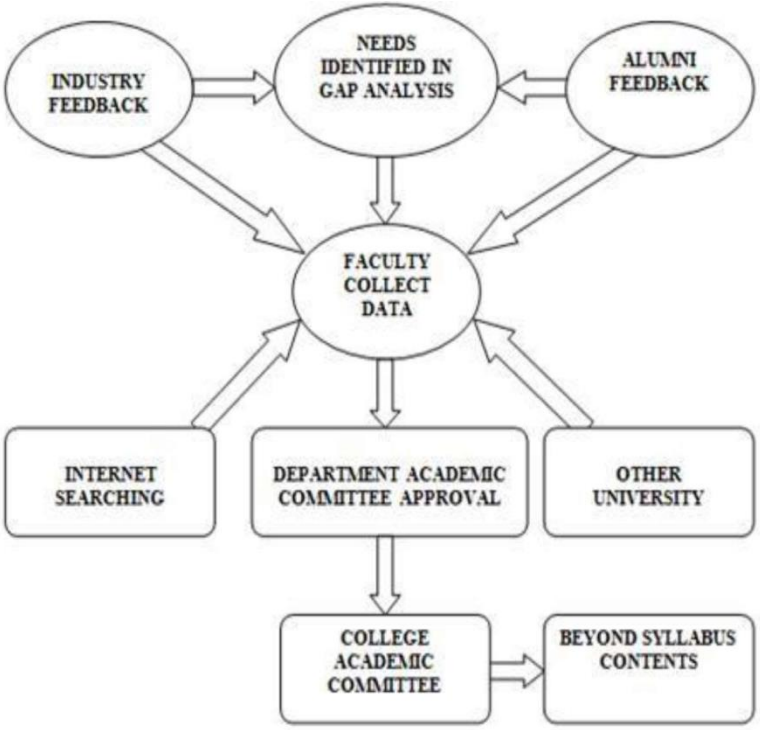


Figure 2.1: Process used to identify the curricular Gaps

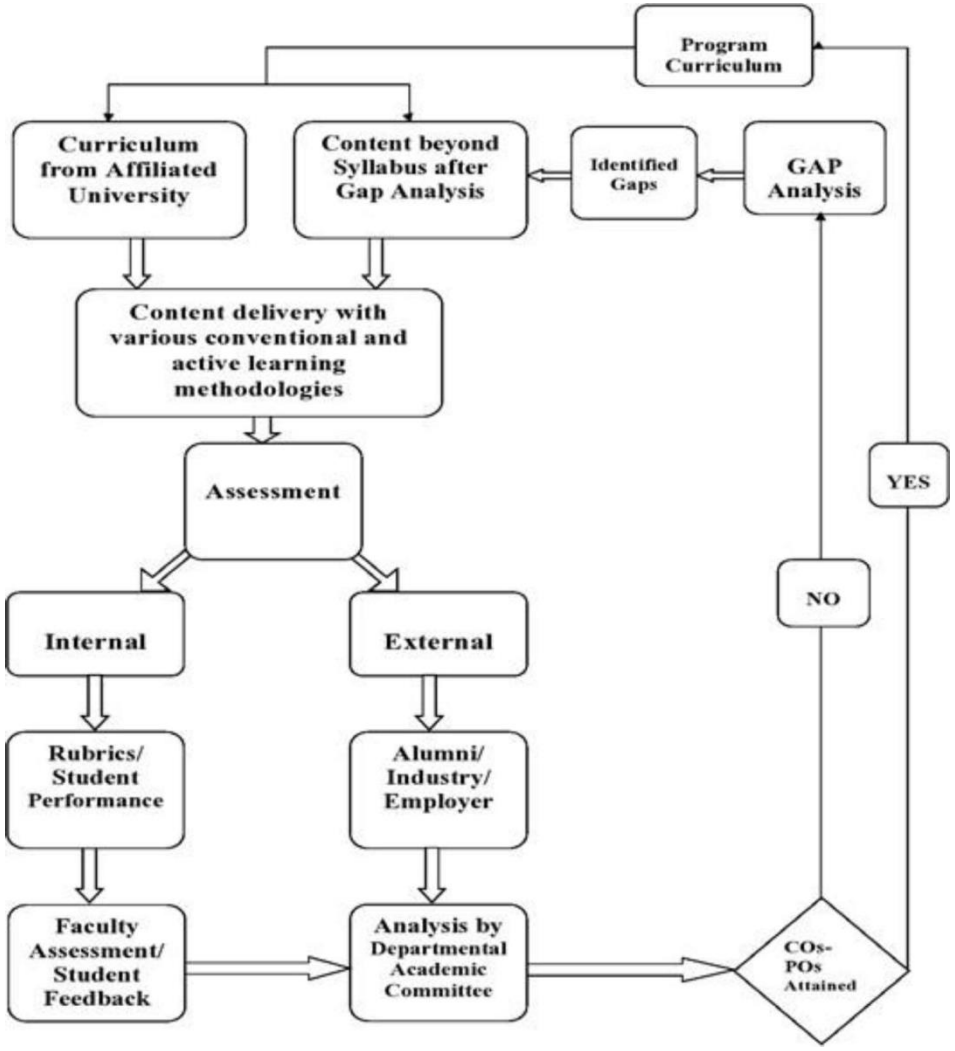


Figure 2.2: Process of assessment of Gap Analysis

- **GAPS identified:**

List of Curricular Gaps CAY 2020-2021

S.NO	Course Name	Gap (title of the Topic)
1	MMT Lab	Shaper, Planner, Slotter, Machine tool alignment of lathe & tools maker microscope
2	Finite Element Analysis	Galerkin's Approach, Analysis of circular shaft subjected to torsion

List of Curricular Gaps CAY 2019-2020

S.NO	Course Name	Gap (title of the Topic)
1	Heat Transfer	Applications of Empirical relations to various geometries for laminar and turbulent flow
2	CAD/CAM	Quality Assurance and Advanced Quality improvements tools
3	CAD/CAM lab	Master CAM and its scopes
4	Refrigeration and Air-Conditioning	Recent trends in Air-Conditioning Systems

List of Curricular Gaps CAYm1 2018-2019

S.NO	Course Name	Gap (title of the Topic)
1.	Unconventional machining process	Magnetic Abrasive finishing
2.	Instrumentation and control systems	Bi metallic strips, Liquid in glass thermometer &Electric Resistance
3	KOM	Kinetics of rigid bodies

4	Metrology and Machine Tools	Smart Materials and its applications in automotive fields
5	Manufacturing Process	Micro Manufacturing
6	Heat Transfer	Theoretical Analysis of flowing fluids
7	Design of Machine Elements-II	Application of Journal bearings and Sliding contact bearings in Turbo machines
8	Metallurgy and Material science	Composite materials and its applications

List of Curricular Gaps CAYm2 (2017-2018)

S.NO	Course Name	Gap (title of the Topic)
1.	Heat Transfer	Concept of continuity Momentum and energy equation
2	Thermal Engineering-2	Draught System Chimney
3	Automobile Engineering	Advances in I.C Engine
4	Power plant Engineering	Power from Nature
5	Metallurgy and Material Science	Introduction to Yield Criteria
6	Metrology and Machine Tools	Microstructure evolution during hot working of metallic Materials
7	Engineering Mechanics	Gears based on the course theory of mechanisms
8	Finite Element Method	Dynamic analysis of Components
9	Manufacturing Process	Advance metal removal process

State the delivery details of the content beyond the syllabus for the attainment of POs and PSOs (10) Institute Marks : 10.00

2020-2021

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs,PSOs
1	Industrial Utilization of Shaper, Slotter & Planner	WORKSHOP	16/11/2020 to 20/11/2020	Dr. Singerwal Balasubramaniyam (Prof-VIET) & Dr. Uma Maheshwar (Prof-CMR)	92	PO3, PO5, PO12,PS01
2	Galerkin's Approach,	GUEST LECTURE	12/04/2021	Dr. Ishaq (ISRO-Scientist)	82	PO3, PO6, PO12, PS02
3	Analysis of circular shaft subjected to torsion	GUEST LECTURE	19/07/2021	Dr. K Chandrashekhar (Professor, VGIT)	85	PO3, PO7, PO12, PS01

2019-2020

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	Applications of Empirical relations to various geometries for laminar and turbulent flow	GUEST LECTURE	17/02/2020	Dr. Fahad Anwar (Professor, AMU)	92	PO3, PO5, PO12, PS01
2	Quality Assurance and Advanced Quality improvements tools	WORKSHOP	29/10/2019	Dr. G.M. Sayeed (Professor, KKU)	87	PO3, PO4, PO11, PSO2

3	Master CAM and its scopes	WORKSHOP	23/09/2019	Dr. K Chandrashekhar (Professor,VGIT)	90	PO3, PO5, PO12, PS01, PSO3
4	Recent trends in Air-Conditioning Systems	WORKSHOP	06/02/2020	Mr. A Ramachandran raju (Managing Partner, Deccan Engineers)	85	PO3, PO6, PO7,PO12, PS01, PSO2

2018-19

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	Magnetic Abrasive finishing	WORKSHOP	17/03/2019	Mr.Mirza Haroon Baig (Asst. Professor,NSAKCET)	97	PO1, PO2,PO3, PO4, PO11,PO12 PS01, PSO2
2	Bi metallic strips, Liquid in glass thermometer &Electric resistance	WORKSHOP	29/09/2019	Mr.Sadat Ali (Asst. Professor,NSAKCET)	98	PO1, PO2,PO3, PO4,PO5,PO10,PO11,PO12 PS01, PSO2
3	Kinetics of rigid bodies	Guest Lecturer	16/04/2019	Mr.G Venkateshwarulu (Asst, Professor, Osmania University)	96	PO1, PO2,PO3, PO4,PO5, PO12 PS01, PSO2
4	Smart Materials and its applications in automotive fields	Workshop	30/08/2018	Dr.Zahir Hasan(Professor NSAKCET)	85	PO1,PO6,PO7 PSO3
5	Micro Manufacturing	Workshop	28/01/2019	Dr.Zahir Hasan (ProfessorNSAKCET	89	PO1,PO3,PO5 PSO1
6	Theoretical Analysis of flowing fluids	Workshop	12/01/2019	Dr.Maqbool Hussaini (Professor,NSAKCET)	88	PO01,PO3,PO9, PO12 PSO2
7	Application of Journal bearings and Sliding contact bearings in Turbomachines	Workshop	16/02/2019	Dr.Syed Mujahed Hussaim(HOD,NSAKCET)	90	PO1,PO3, PO9,PO12 PSO2
8	Composite materials andits applications	Workshop	28/08/2018	Dr.K.M. Mehboob Shareef (Professor,NSAKCET)	91	PO1, PO2,PO4, PO5 PSO3

2017-18

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	Concept of continuity Momentum and energy equation	Workshop	23/09/2017	Mrs.Tasleema Banu (Asst. Professor,NSAKCET)	91	PO1, PO2,PO3, PO4,PO5,PO9,PO11, PO12, PS01, PSO2
2	Draught System Chimneys	Workshop	31/03/2018	Dr.Maqbool Hussain (Professor)	90	PO1, PO2,PO3, PO4, PO11,PO12 PS01, PSO2
3	Advances in I.C Engine	Workshop	17/08/2018	Dr. AVSSKS Gupta (Professor, JNTUH)	95	PO1,PO3,PO4, PO9,PO11,PO12 PSO1,PSO2
4	Power from Nature	Workshop	13/10/2017	Dr.Md Nasarullah Sharif (Professor,NSAKCET)	88	PO1, PO3, PO5, PO6, PO9 PSO1,PSO3
5	Introduction to Yield Criteria	Workshop	25/10/2017	Dr.Syed Mujahed Hussaini (HOD,NSAKCET)	89	PO1, PO2, PO3, PO4, PO11 PSO1,PSO3
6	Microstructure evolution during hot working of metallic Materials	Workshop	23/09/2017	Dr.C Vasanata Kumar(Professor,NSAKCET)	91	PO1, PO6, PO7 PSO3
7	Gears based on the course theory of mechanisms	Workshop	25/08/2017	Raza Ahmed Khan (Asst. Professor)	87	PO1, PO3, PO6, PO7 PSO1
8	Dynamic analysis of Components	Workshop	23/02/2018	Mrs.Sartaz(Asst. Professor)	85	PO1, PO3, PO5, PO6, PO9 PSO1,PSO3
9	Advance metal removal process	Workshop	17/03/2018	Dr.Syed Mujahed Hussaim(HOD,NSAKCET)	84	PO1, PO2, PO3, PO4, PO12 PSO1

Teaching - Learning Processes (100)

Total Marks 100.00

Describe processes followed to improve quality of Teaching & Learning (25)

Institute Marks : 25.00

2.2	Teaching Learning Process	100
2.2.1	Describe processes followed to improve quality of teaching and learning.	25
A.	Adherence to Academic calendar	

To improve the quality policy in the Department, faculty strictly adheres to the University, Institutional and Department Calendars.

1. **University Calendar:** University academic calendar has been provided by the JNTUH, Hyderabad every year. For every cademic year, JNTUH University circulates the academic calendars for both odd and even semesters before the commencement of the class work. The sample of the calendar of JNTUH (July 2020 -July 2021) given below

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

ACADEMIC CALENDAR 2021-22

B. TECH./B.PHARM. II YEAR I & II SEMESTERS

I SEM

S. No	Description	Duration	
		From	To
1	Dussehra Recess	11.10.2021	16.10.2021 (1 Week)
2	Commencement of I Semester classwork	**18.10.2021**	
3	1st Spell of Instructions	18.10.2021	11.12.2021 (8 Weeks)
4	First Mid Term Examinations	13.12.2021	18.12.2021 (1 Week)
5	Submission of First Mid Term Exam Marks to the University on or before	24.12.2021	
6	2nd Spell of Instructions	20.12.2021	12.02.2022 (8 Weeks)
7	Second Mid Term Examinations	14.02.2022	19.02.2022 (1 Week)
8	Preparation Holidays and Practical Examinations	21.02.2022	26.02.2022 (1 Week)
9	Submission of Second Mid Term Exam Marks to the University on or before	26.02.2022	
10	End Semester Examinations	28.02.2022	12.03.2022 (2 Weeks)

II SEM

S. No	Description	Duration	
		From	To
1	Commencement of II Semester classwork	**14.03.2022**	
2	1st Spell of Instructions (including Summer Vacation)	14.03.2022	28.05.2022 (11Weeks)
3	Summer Vacation	09.05.2022	21.05.2022 (2 Weeks)
4	First Mid Term Examinations	30.05.2022	04.06.2022 (1 Week)
5	Submission of First Mid Term Exam Marks to the University on or before	11.06.2022	
6	2nd Spell of Instructions	06.06.2022	30.07.2022 (8 Weeks)
7	Second Mid Term Examinations	01.08.2022	06.08.2022 (1 Week)
8	Preparation Holidays and Practical Examinations	09.08.2022	16.08.2022 (1 Week)
9	Submission of Second Mid Term Exam Marks to the University on or before	16.08.2022	
10	End Semester Examinations	17.08.2022	30.08.2022 (2 Weeks)

REGISTRAR

REVISED ALMANAC for the Academic year 2021-2022
B.E.(All Branches) **III, V, and VII – Semesters**

(For all Engineering Colleges Affiliated to Osmania University)

Because of the confusion that prevailed for the Open Electives and content in some of the courses of the departments to facilitate the faculty members as well as the students the revised almanac is given below.

	ALL ODD Semesters	
1	Commencement of Class work in offline	08.11.2021
2	CIE (Internal Test) - I	13.12.2021 to 16.12.2021
3	Display of CIE-I Marks	27.12.2021
4	CIE (Internal Test) - II	27.01.2022 to 29.01.2022
5	Last Date of Instruction	05.02.2022
6	Display of Total Sessional Marks	08.02.2022
7	Submission of Attendance to O.U Exam Branch	07.02.2022
8	Submission of Sessional Marks to O.U Exam Branch	10.02.2022
9	Commencement of Theory Examinations (SEE)	13.02.2022
10	SEE practical examinations after the completion of theory SEE	

Dean 27.12.2021
Faculty of Engineering., O.U.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
REVISED ACADEMIC CALENDAR 2020-21
For All Constituent & Affiliated Colleges of JNTUH
B. Tech./B.Pharm. II, III & IV Years I & II Semesters

B. Tech./B.Pharm. II, III & IV Years - I Semester

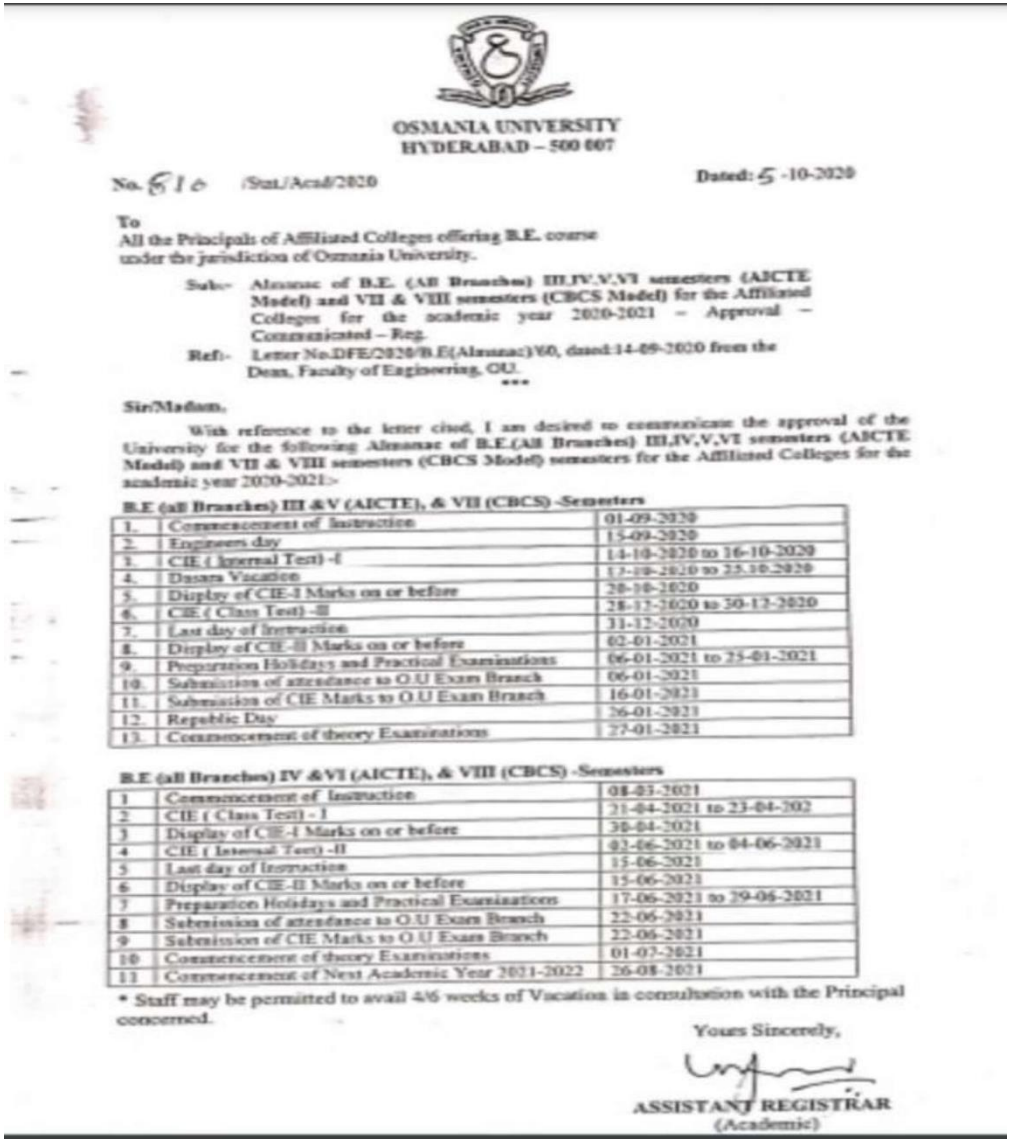
S. No	Description	Duration	
		From	To
1	Commencement of I Semester classwork	01.09.2020	
2	1st Spell of Instructions (including Dussehra Recess)	01.09.2020	31.10.2020 (9 Weeks)
3	Dussehra Recess	19.10.2020	24.10.2020
4	End Examinations preparation holidays - Previous Semesters	02.11.2020	04.11.2020 (3 days)
5	2nd Spell of Instructions (including First Mid Term Examinations)	14.12.2020	13.02.2021 (9 Weeks)
6	First Mid Term Examinations	21.12.2020	28.12.2020 (1 Week)
7	Submission of First Mid Term Exam Marks to the University on or before	04.01.2021	
8	Second Mid Term Examinations	15.02.2021	20.02.2021 (1 Week)
9	Practical classes	22.02.2021	27.02.2021 (1 Week)
10	Preparation Holidays and Practical Examinations	01.03.2021	06.03.2021 (1 Week)
11	Submission of Second Mid Term Exam Marks to the University on or before	06.03.2021	
12	End Semester Examinations	08.03.2021	20.03.2021 (2 Weeks)

B. Tech./ B.Pharm. II, III & IV Years - II Semester

S. No	Description	Duration	
		From	To
1	Commencement of II Semester classwork		**22.03.2021**
2	1st Spell of Instructions	22.03.2021	15.05.2021 (8 Weeks)
3	Summer Vacation	17.05.2021	29.05.2021 (2 Weeks)
4	First Mid Term Examinations	31.05.2021	05.06.2021 (1 Week)
5	Submission of First Mid Term Exam Marks to the University on or before	11.06.2021	
6	2nd Spell of Instructions	07.06.2021	31.07.2021 (8 Weeks)
7	Second Mid Term Examinations	02.08.2021	07.08.2021 (1 Week)
8	Preparation Holidays and Practical Examinations	09.08.2021	14.08.2021 (1 Week)
9	Submission of Second Mid Term Exam Marks to the University on or before	14.08.2021	
10	End Semester Examinations	16.08.2021	28.08.2021 (2 Weeks)

Note: 1 All the laboratory courses shall be conducted once normalcy is restored.
2 Regular End Semester Examinations of previous Semester (including lab exams) as per the data received from the Examination branch: 05.11.2020 to 11.12.2020.

Sd/- xxxxxx
DIRECTOR, ACADEMIC & PLANNING



OSMANIA UNIVERSITY
HYDERABAD – 500 007

No. 616 /Stat./Acad/2020 Dated: 5 -10-2020

To
All the Principals of Affiliated Colleges offering B.E. course
under the jurisdiction of Osmania University.

Sub:- Almanac of B.E. (All Branches) III,IV,V,VI semesters (AICTE Model) and VII & VIII semesters (CBCS Model) for the Affiliated Colleges for the academic year 2020-2021 – Approval – Communicated – Reg.

Ref:- Letter No.DFE/2020/B.E(Almanac)/60, dated:14-09-2020 from the Dean, Faculty of Engineering, OU.

***

Sir/Madam,

With reference to the letter cited, I am desired to communicate the approval of the University for the following Almanac of B.E.(All Branches) III,IV,V,VI semesters (AICTE Model) and VII & VIII semesters (CBCS Model) semesters for the Affiliated Colleges for the academic year 2020-2021:-

B.E (all Branches) III &V (AICTE), & VII (CBCS) -Semesters

1.	Commencement of Instruction	01-09-2020
2.	Engineers day	15-09-2020
3.	CIE (Internal Test) -I	14-10-2020 to 16-10-2020
4.	Dasara Vacation	17-10-2020 to 25.10.2020
5.	Display of CIE-I Marks on or before	28-10-2020
6.	CIE (Class Test) -II	28-12-2020 to 30-12-2020
7.	Last day of Instruction	31-12-2020
8.	Display of CIE-II Marks on or before	02-01-2021
9.	Preparation Holidays and Practical Examinations	06-01-2021 to 25-01-2021
10.	Submission of attendance to O.U Exam Branch	06-01-2021
11.	Submission of CIE Marks to O.U Exam Branch	16-01-2021
12.	Republic Day	26-01-2021
13.	Commencement of theory Examinations	27-01-2021

B.E (all Branches) IV &VI (AICTE), & VIII (CBCS) -Semesters

1	Commencement of Instruction	08-03-2021
2	CIE (Class Test) - I	21-04-2021 to 23-04-202
3	Display of CIE-I Marks on or before	30-04-2021
4	CIE (Internal Test) -II	02-06-2021 to 04-06-2021
5	Last day of Instruction	15-06-2021
6	Display of CIE-II Marks on or before	15-06-2021
7	Preparation Holidays and Practical Examinations	17-06-2021 to 29-06-2021
8	Submission of attendance to O.U Exam Branch	22-06-2021
9	Submission of CIE Marks to O.U Exam Branch	22-06-2021
10	Commencement of theory Examinations	01-07-2021
11	Commencement of Next Academic Year 2021-2022	26-08-2021

* Staff may be permitted to avail 4/6 weeks of Vacation in consultation with the Principal concerned.

Yours Sincerely,

ASSISTANT REGISTRAR
(Academic)

OU Academic calendar 2020-2021

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

REVISED ACADEMIC CALENDAR (2019-20)

FOR NON-AUTONOMOUS CONSTITUENT& AFFILIATED COLLEGES

B. TECH./B.PHARM. II, III & IV YEARS I & II SEMESTERS

I SEM

S. No	EVENT	DATE	Duration
1	Commencement of Instruction	15th July 2019	--
2	First Mid Term Examinations	12th to 14th Sept. 2019	--
3	Submission of First Mid Term Exam Marks to University on or before	20th Sept. 2019	--
4	Parent-Teacher Meeting	21st Sept. 2019	--
5	Dussehra recess	7th to 19th Oct. 2019	2 weeks
6	Last date of Instruction	20th Nov. 2019	17 weeks
7	Second Mid Term Examinations	21st to 23rd Nov. 2019	--
8	Preparation Holidays and Practical Examinations	25th to 30th Nov. 2019	1 week
9	Submission of Second Mid Term Exam Marks to University on or before	30th Nov. 2019	--
10	End Semester Examinations	2nd to 14th Dec. 2019	2 weeks

II SEM

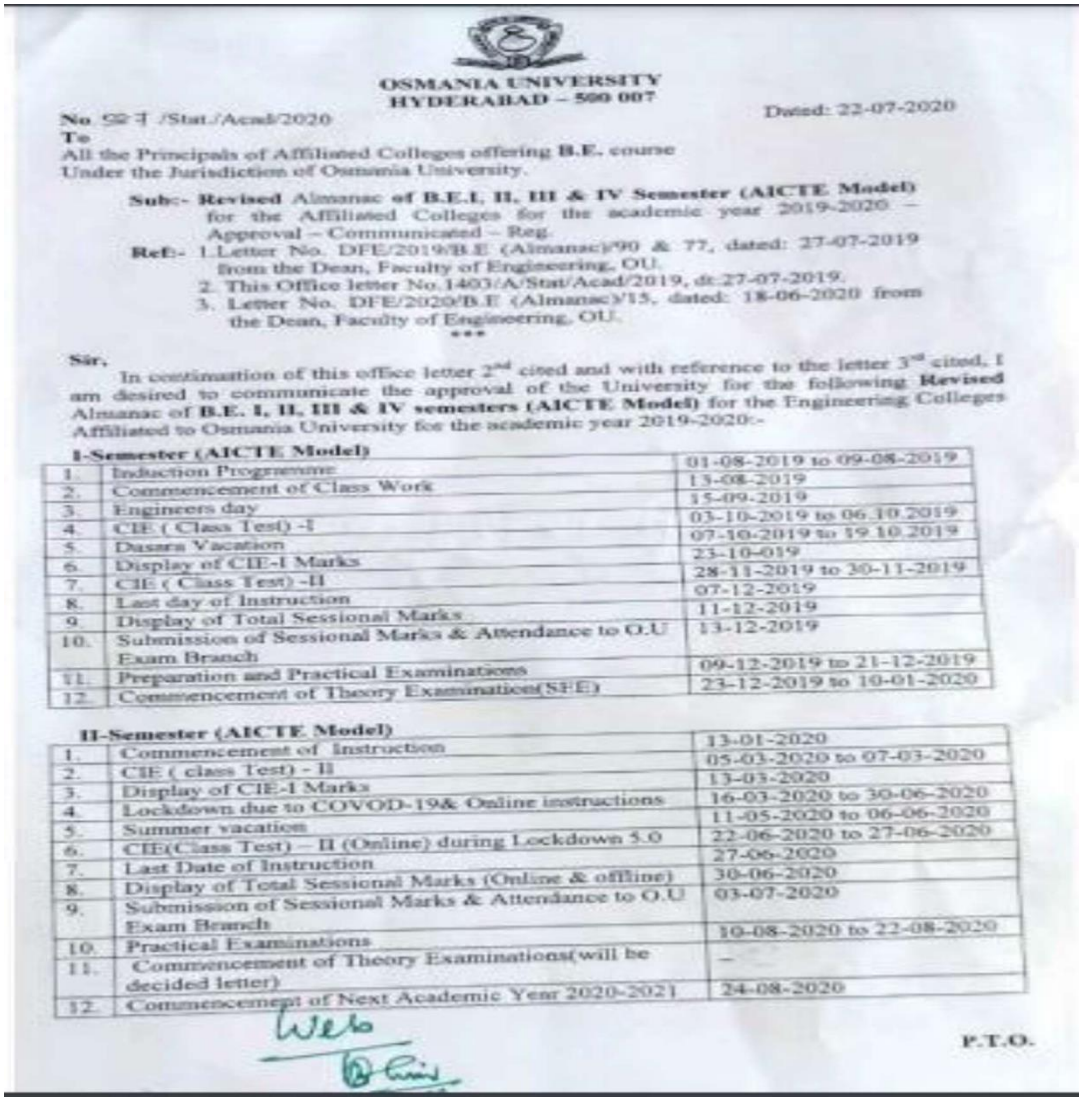
S. No	EVENT	DATE	Duration
1	Commencement of Instruction	16th Dec. 2019	--
2	First Mid Term Examinations	10th to 12th Feb. 2020	--
3	Submission of First Mid Term Exam Marks to University on or before	19th Feb. 2020	--
4	Parent-Teacher Meeting	14th March 2020	--
5	Last date of Instruction	7th April 2020	16 weeks
6	Second Mid Term Examinations	8th to 11th April 2020	--
7	Preparation Holidays and Practical Examinations	13th to 18th April 2020	1 week
8	Submission of Second Mid Term Exam Marks to University on or before	18th April 2020	--
9	End Semester Examinations	20th April to 2nd May 2020	2 weeks
10	Summer Vacation	4th May to 4th July 2020	9 weeks

21.10.19

DIRECTOR

ACADEMIC & PLANNING, JNTUH

– Academic calendar for the year 2019- 20 by JNTUH



OSMANIA UNIVERSITY
HYDERABAD – 500 007

No. 92-I /Stat./Acad/2020 Dated: 22-07-2020

To
All the Principals of Affiliated Colleges offering B.E. course
Under the Jurisdiction of Osmania University.

Sub:- Revised Almanac **of B.E.I, II, III & IV Semester (AICTE Model)** for the Affiliated Colleges for the academic year 2019-2020 – Approval – Communicated – Reg.

Ref:- 1.Letter No. DFE/2019/B.E (Almanac)/90 & 77, dated: 27-07-2019 from the Dean, Faculty of Engineering, OU.
2. This Office letter No.1403/A/Stat/Acad/2019, dt.27-07-2019.
3. Letter No. DFE/2020/B.E (Almanac)/15, dated: 18-06-2020 from the Dean, Faculty of Engineering, OU.

***

Sir,

In continuation of this office letter 2nd cited and with reference to the letter 3rd cited, I am desired to communicate the approval of the University for the following **Revised** Almanac of **B.E. I, II, III & IV semesters (AICTE Model)** for the Engineering Colleges Affiliated to Osmania University for the academic year 2019-2020:-

I-Semester (AICTE Model)

1.	Induction Programme	01-08-2019 to 09-08-2019
2.	Commencement of Class Work	13-08-2019
3.	Engineers day	15-09-2019
4.	CIE (Class Test) -I	03-10-2019 to 06.10.2019
5.	Dasara Vacation	07-10-2019 to 19.10.2019
6.	Display of CIE-I Marks	23-10-019
7.	CIE (Class Test) -II	28-11-2019 to 30-11-2019
8.	Last day of Instruction	07-12-2019
9.	Display of Total Sessional Marks	11-12-2019
10.	Submission of Sessional Marks & Attendance to O.U Exam Branch	13-12-2019
11.	Preparation and Practical Examinations	09-12-2019 to 21-12-2019
12.	Commencement of Theory Examinations(SEE)	23-12-2019 to 10-01-2020

II-Semester (AICTE Model)

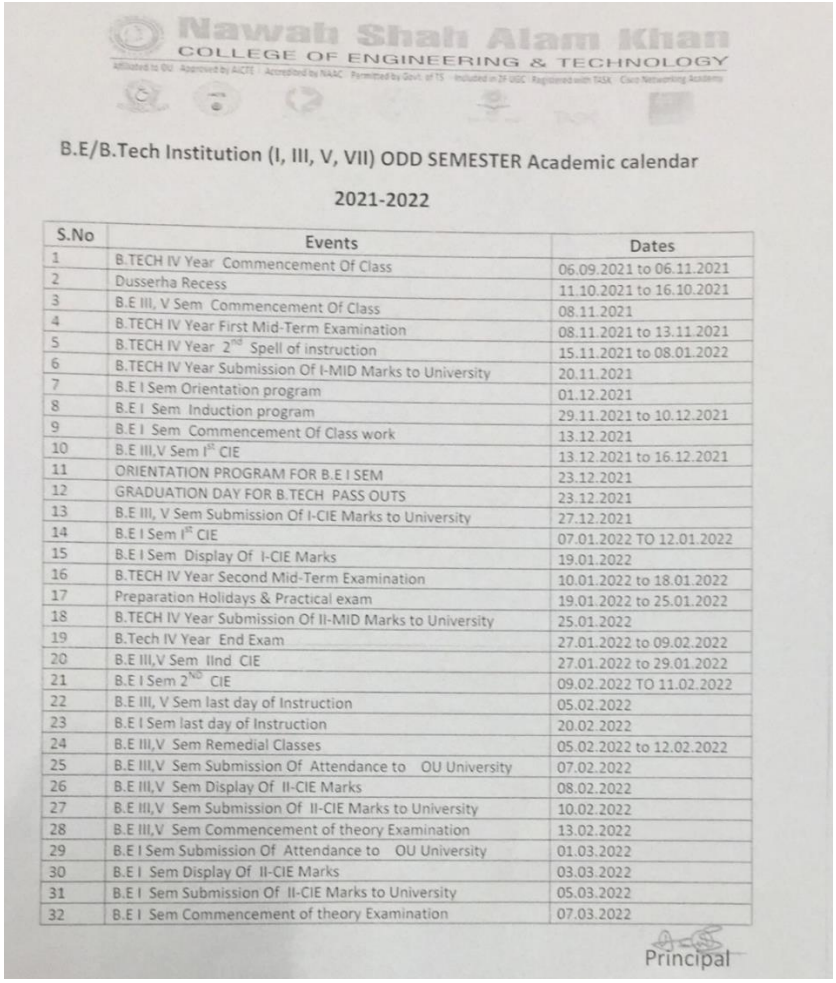
1.	Commencement of Instruction	13-01-2020
2.	CIE (class Test) - II	05-03-2020 to 07-03-2020
3.	Display of CIE-I Marks	13-03-2020
4.	Lockdown due to COVOD-19& Online instructions	16-03-2020 to 30-06-2020
5.	Summer vacation	11-05-2020 to 06-06-2020
6.	CIE(Class Test) – II (Online) during Lockdown 5.0	22-06-2020 to 27-06-2020
7.	Last Date of Instruction	27-06-2020
8.	Display of Total Sessional Marks (Online & offline)	30-06-2020
9.	Submission of Sessional Marks & Attendance to O.U Exam Branch	03-07-2020
10.	Practical Examinations	10-08-2020 to 22-08-2020
11.	Commencement of Theory Examinations(will be decided letter)	–
12.	Commencement of Next Academic Year 2020-2021	24-08-2020

P.T.O.

OU Academic calendar 2019-2020

2 Institute Calendar- It has been prepared every year just after receipt of the University academic calendar. It contains the events of the University and the events of the Institute which are useful in overall development of the Students. We follow the institute academic calendar in total. Our management and higher officials are keen to follow up the academic calendar. From the college calendar of events a Department calendar of events is derived which is specific to the Department.

The sample of the calendar of even semester (2021-22) is given below:



Nawab Shah Alam Khan
COLLEGE OF ENGINEERING & TECHNOLOGY

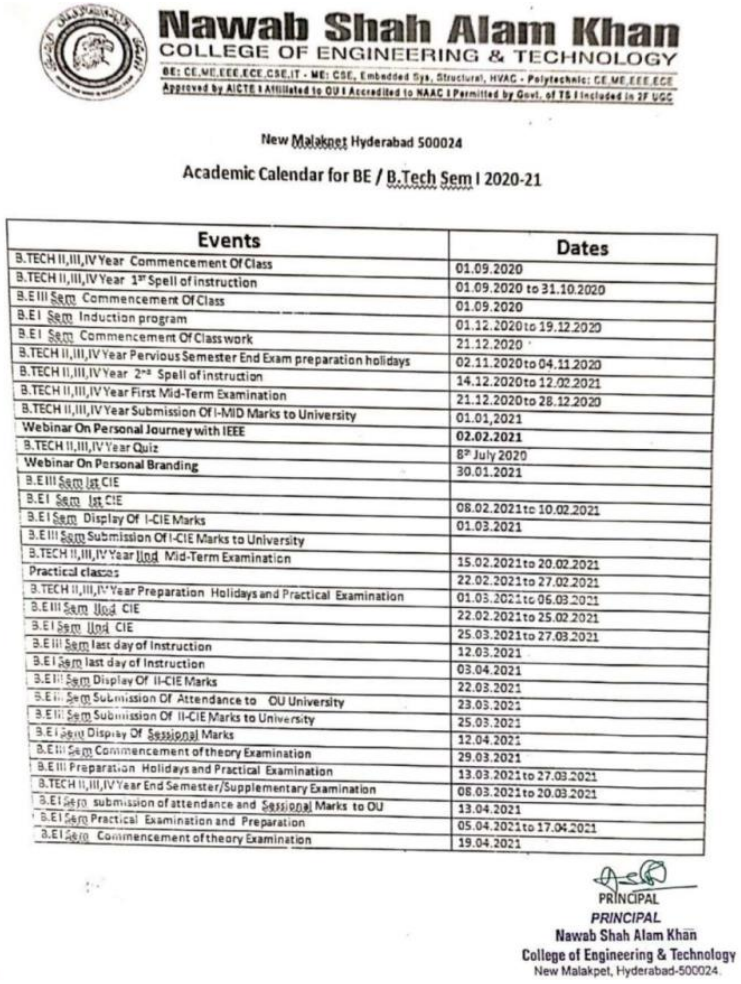
B.E/B.Tech Institution (I, III, V, VII) ODD SEMESTER Academic calendar

2021-2022

S.No	Events	Dates
1	B.TECH IV Year Commencement Of Class	06.09.2021 to 06.11.2021
2	Dusserha Recess	11.10.2021 to 16.10.2021
3	B.E III, V Sem Commencement Of Class	08.11.2021
4	B.TECH IV Year First Mid-Term Examination	08.11.2021 to 13.11.2021
5	B.TECH IV Year 2nd Spell of instruction	15.11.2021 to 08.01.2022
6	B.TECH IV Year Submission Of I-MID Marks to University	20.11.2021
7	B.E I Sem Orientation program	01.12.2021
8	B.E I Sem Induction program	29.11.2021 to 10.12.2021
9	B.E I Sem Commencement Of Class work	13.12.2021
10	B.E III,V Sem Ist CIE	13.12.2021 to 16.12.2021
11	ORIENTATION PROGRAM FOR B.E I SEM	23.12.2021
12	GRADUATION DAY FOR B.TECH PASS OUTS	23.12.2021
13	B.E III, V Sem Submission Of I-CIE Marks to University	27.12.2021
14	B.E I Sem Ist CIE	07.01.2022 TO 12.01.2022
15	B.E I Sem Display Of I-CIE Marks	19.01.2022
16	B.TECH IV Year Second Mid-Term Examination	10.01.2022 to 18.01.2022
17	Preparation Holidays & Practical exam	19.01.2022 to 25.01.2022
18	B.TECH IV Year Submission Of II-MID Marks to University	25.01.2022
19	B.Tech IV Year End Exam	27.01.2022 to 09.02.2022
20	B.E III,V Sem IInd CIE	27.01.2022 to 29.01.2022
21	B.E I Sem 2ND CIE	09.02.2022 TO 11.02.2022
22	B.E III, V Sem last day of Instruction	05.02.2022
23	B.E I Sem last day of Instruction	20.02.2022
24	B.E III,V Sem Remedial Classes	05.02.2022 to 12.02.2022
25	B.E III,V Sem Submission Of Attendance to OU University	07.02.2022
26	B.E III,V Sem Display Of II-CIE Marks	08.02.2022
27	B.E III,V Sem Submission Of II-CIE Marks to University	10.02.2022
28	B.E III,V Sem Commencement of theory Examination	13.02.2022
29	B.E I Sem Submission Of Attendance to OU University	01.03.2022
30	B.E I Sem Display Of II-CIE Marks	03.03.2022
31	B.E I Sem Submission Of II-CIE Marks to University	05.03.2022
32	B.E I Sem Commencement of theory Examination	07.03.2022

Principal

The sample of the calendar of even semester (2020-21) is given below:



Nawab Shah Alam Khan
COLLEGE OF ENGINEERING & TECHNOLOGY
BE: CE,ME,EEE,ECE,CSE,IT - ME: CSE, Embedded Sys, Structural, HVAC - Polytechnic: CE,ME,EEE,ECE
Approved by AICTE I Affiliated to OU I Accredited to NAAC I Permitted by Govt. of TS I Included in 2F UGC

New Malaknet Hyderabad 500024

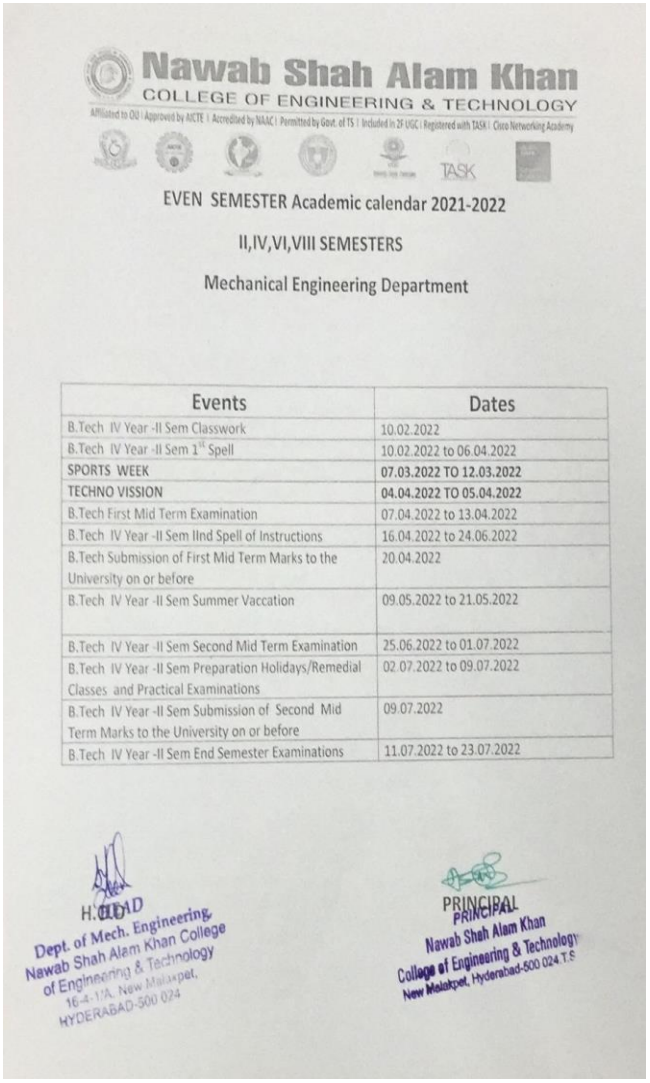
Academic Calendar for BE / B.Tech Sem I 2020-21

Events	Dates
B.TECH II,III,IV Year Commencement Of Class	01.09.2020
B.TECH II,III,IV Year 1st Spell of instruction	01.09.2020 to 31.10.2020
B.E III Sem Commencement Of Class	01.09.2020
B.E I Sem Induction program	01.12.2020 to 19.12.2020
B.E I Sem Commencement Of Class work	21.12.2020
B.TECH II,III,IV Year Pervious Semester End Exam preparation holidays	02.11.2020 to 04.11.2020
B.TECH II,III,IV Year 2nd Spell of instruction	14.12.2020 to 12.02.2021
B.TECH II,III,IV Year First Mid-Term Examination	21.12.2020 to 28.12.2020
B.TECH II,III,IV Year Submission Of I-MID Marks to University	01.01,2021
Webinar On Personal Journey with IEEE	**02.02.2021**
B.TECH II,III,IV Year Quiz	8th July 2020
Webinar On Personal Branding	30.01.2021
B.E III Sem Ist CIE	
B.E I Sem Ist CIE	08.02.2021 to 10.02.2021
B.E I Sem Display Of I-CIE Marks	01.03.2021
B.E III Sem Submission Of I-CIE Marks to University	
B.TECH II,III,IV Year IInd Mid-Term Examination	15.02.2021 to 20.02.2021
Practical classes	22.02.2021 to 27.02.2021
B.TECH II,III,IV Year Preparation Holidays and Practical Examination	01.03.2021 to 06.03.2021
B.E III Sem IInd CIE	22.02.2021 to 25.02.2021
B.E I Sem IInd CIE	25.03.2021 to 27.03.2021
B.E III Sem last day of Instruction	12.03.2021
B.E I Sem last day of Instruction	03.04.2021
B.E III Sem Display Of II-CIE Marks	22.03.2021
B.E III Sem Submission Of Attendance to OU University	23.03.2021
B.E III Sem Submission Of II-CIE Marks to University	25.03.2021
B.E I Sem Display Of Sessional Marks	12.04.2021
B.E III Sem Commencement of theory Examination	29.03.2021
B.E III Preparation Holidays and Practical Examination	13.03.2021 to 27.03.2021
B.TECH II,III,IV Year End Semester/Supplementary Examination	08.03.2021 to 20.03.2021
B.E I Sem submission of attendance and Sessional Marks to OU	13.04.2021
B.E I Sem Practical Examination and Preparation	05.04.2021 to 17.04.2021
B.E I Sem Commencement of theory Examination	19.04.2021

PRINCIPAL
PRINCIPAL
Nawab Shah Alam Khan
College of Engineering & Technology
New Malakpet, Hyderabad-500024.

3 **Departmental Calendar:** Departmental calendar (based on University calendar and Institutional calendar) is prepared before the commencement of each semester. It presents the activities planned for the semester. Subject allotment is done well in advance for the staff to prepare lesson plans, soft and hard copies of the lecture notes.

Sample academic calendar of Mechanical Department.



Nawab Shah Alam Khan
COLLEGE OF ENGINEERING & TECHNOLOGY

EVEN SEMESTER Academic calendar 2021-2022

II,IV,VI,VIII SEMESTERS

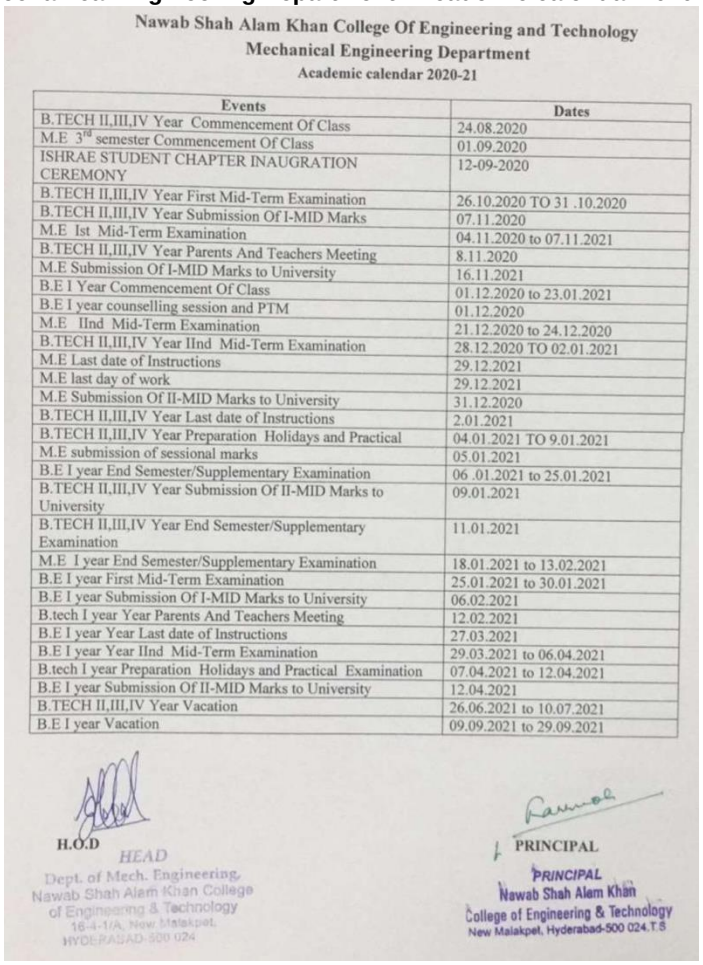
Mechanical Engineering Department

Events	Dates
B.Tech IV Year -II Sem Classwork	10.02.2022
B.Tech IV Year -II Sem 1st Spell	10.02.2022 to 06.04.2022
SPORTS WEEK	07.03.2022 TO 12.03.2022
TECHNO VISSION	04.04.2022 TO 05.04.2022
B.Tech First Mid Term Examination	07.04.2022 to 13.04.2022
B.Tech IV Year -II Sem IInd Spell of Instructions	16.04.2022 to 24.06.2022
B.Tech Submission of First Mid Term Marks to the University on or before	20.04.2022
B.Tech IV Year -II Sem Summer Vaccation	09.05.2022 to 21.05.2022
B.Tech IV Year -II Sem Second Mid Term Examination	25.06.2022 to 01.07.2022
B.Tech IV Year -II Sem Preparation Holidays/Remedial Classes and Practical Examinations	02.07.2022 to 09.07.2022
B.Tech IV Year -II Sem Submission of Second Mid Term Marks to the University on or before	09.07.2022
B.Tech IV Year -II Sem End Semester Examinations	11.07.2022 to 23.07.2022

H.O.D
Dept. of Mech. Engineering
Nawab Shah Alam Khan College of Engineering & Technology
16-4-1/A, New Malakpet, HYDERABAD-500 024

PRINCIPAL
Nawab Shah Alam Khan College of Engineering & Technology
New Malakpet, Hyderabad-500 024.T.S

Nawab Shah Alam Khan College Of Engineering and Technology
Mechanical Engineering Department : Academic calendar 2020-21



Nawab Shah Alam Khan College Of Engineering and Technology
Mechanical Engineering Department
Academic calendar 2020-21

Events	Dates
B.TECH II,III,IV Year Commencement Of Class	24.08.2020
M.E 3rd semester Commencement Of Class	01.09.2020
ISHRAE STUDENT CHAPTER INAUGRATION CEREMONY	12-09-2020
B.TECH II,III,IV Year First Mid-Term Examination	26.10.2020 TO 31 .10.2020
B.TECH II,III,IV Year Submission Of I-MID Marks	07.11.2020
M.E Ist Mid-Term Examination	04.11.2020 to 07.11.2021
B.TECH II,III,IV Year Parents And Teachers Meeting	8.11.2020
M.E Submission Of I-MID Marks to University	16.11.2021
B.E I Year Commencement Of Class	01.12.2020 to 23.01.2021
B.E I year counselling session and PTM	01.12.2020
M.E IInd Mid-Term Examination	21.12.2020 to 24.12.2020
B.TECH II,III,IV Year IInd Mid-Term Examination	28.12.2020 TO 02.01.2021
M.E Last date of Instructions	29.12.2021
M.E last day of work	29.12.2021
M.E Submission Of II-MID Marks to University	31.12.2020
B.TECH II,III,IV Year Last date of Instructions	2.01.2021
B.TECH II,III,IV Year Preparation Holidays and Practical	04.01.2021 TO 9.01.2021
M.E submission of sessional marks	05.01.2021
B.E I year End Semester/Supplementary Examination	06 .01.2021 to 25.01.2021
B.TECH II,III,IV Year Submission Of II-MID Marks to University	09.01.2021
B.TECH II,III,IV Year End Semester/Supplementary Examination	11.01.2021
M.E I year End Semester/Supplementary Examination	18.01.2021 to 13.02.2021
B.E I year First Mid-Term Examination	25.01.2021 to 30.01.2021
B.E I year Submission Of I-MID Marks to University	06.02.2021
B.tech I year Year Parents And Teachers Meeting	12.02.2021
B.E I year Year Last date of Instructions	27.03.2021
B.E I year Year IInd Mid-Term Examination	29.03.2021 to 06.04.2021
B.tech I year Preparation Holidays and Practical Examination	07.04.2021 to 12.04.2021
B.E I year Submission Of II-MID Marks to University	12.04.2021
B.TECH II,III,IV Year Vacation	26.06.2021 to 10.07.2021
B.E I year Vacation	09.09.2021 to 29.09.2021

H.O.D

HEAD
Dept. of Mech. Engineering,
Nawab Shah Alam Khan College
of Engineering & Technology
16-4-1/A, New Malakpet,
HYDERABAD-500 024

PRINCIPAL

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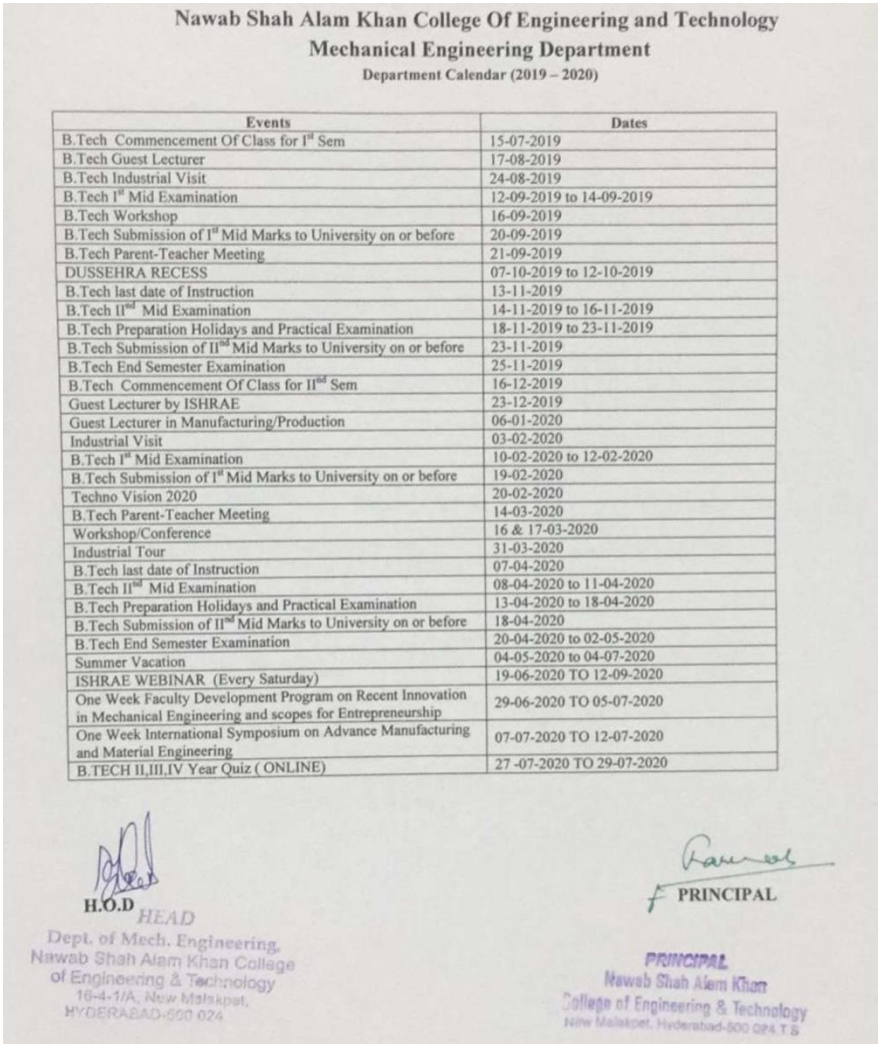
Nawab Shah Alam Khan
College of Engineering & Technology
New Malakpet, Hyderabad-500 024.T.S

Academic calendar 2019-2020
Mechanical Engineering Department

Department Sample Calendar (2019- 2020)



Nawab Shah Alam Khan College Of Engineering and Technology
Mechanical Engineering Department
Department Calendar (2019 – 2020)

Events	Dates
B.Tech Commencement Of Class for I[st] Sem	15-07-2019
B.Tech Guest Lecturer	17-08-2019
B.Tech Industrial Visit	24-08-2019
B.Tech I[st] Mid Examination	12-09-2019 to 14-09-2019
B.Tech Workshop	16-09-2019
B.Tech Submission of I[st] Mid Marks to University on or before	20-09-2019
B.Tech Parent-Teacher Meeting	21-09-2019
DUSSEHRA RECESS	07-10-2019 to 12-10-2019
B.Tech last date of Instruction	13-11-2019
B.Tech II[nd] Mid Examination	14-11-2019 to 16-11-2019
B.Tech Preparation Holidays and Practical Examination	18-11-2019 to 23-11-2019
B.Tech Submission of II[nd] Mid Marks to University on or before	23-11-2019
B.Tech End Semester Examination	25-11-2019
B.Tech Commencement Of Class for II[nd] Sem	16-12-2019
Guest Lecturer by ISHRAE	23-12-2019
Guest Lecturer in Manufacturing/Production	06-01-2020
Industrial Visit	03-02-2020
B.Tech I[st] Mid Examination	10-02-2020 to 12-02-2020
B.Tech Submission of I[st] Mid Marks to University on or before	19-02-2020
Techno Vision 2020	20-02-2020
B.Tech Parent-Teacher Meeting	14-03-2020
Workshop/Conference	16 & 17-03-2020
Industrial Tour	31-03-2020
B.Tech last date of Instruction	07-04-2020
B.Tech II[nd] Mid Examination	08-04-2020 to 11-04-2020
B.Tech Preparation Holidays and Practical Examination	13-04-2020 to 18-04-2020
B.Tech Submission of II[nd] Mid Marks to University on or before	18-04-2020
B.Tech End Semester Examination	20-04-2020 to 02-05-2020
Summer Vacation	04-05-2020 to 04-07-2020
ISHRAE WEBINAR (Every Saturday)	19-06-2020 TO 12-09-2020
One Week Faculty Development Program on Recent Innovation in Mechanical Engineering and scopes for Entrepreneurship	29-06-2020 TO 05-07-2020
One Week International Symposium on Advance Manufacturing and Material Engineering	07-07-2020 TO 12-07-2020
B.TECH II,III,IV Year Quiz (ONLINE)	27 -07-2020 TO 29-07-2020

H.O.D

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3. Teaching plan:

- Teaching plan has been maintained according to the University as well as Institute's Calendar and also Department Calendar. First, we count the total number of days and then plan the lectures accordingly which could cover whole syllabus.
  - Teaching plan with course objectives and course outcomes are prepared by the subject handling faculty before the commencement of the semester and is dually approved by the Head of the Department and made available to the Students. Teaching plan is uploaded in the college attendance management software.
  - According to the lesson plan, work done has been inculcated in the course file to ensure coverage of syllabus dually monitored by Head of the Department.

Sample Copy of Teaching Plan is provided below:

NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE – New Delhi, Affiliated to JNTUH Hyderabad)
New Malakpet, Hyderabad 500024

Teaching Plan

Department: Mechanical Engineering
Designation: Asst. Professor
Academic Year: 2019-2020

Name of Faculty: Mohd Mansoor Hasan
Name of Subject: CNC Technology
Year/Semester: IV/ I/ ODD

S. No.	Period No.	Topic	Regular/ Additional
		UNIT-I	
1	1,2	Introduction	Regular
2	3,4	Fundamentals of numerical control, advantage of NC systems,	Regular
3	5,6	Classification of NC systems, point to point, NC and CNC, incremental and absolute, open and closed loop systems,	Regular
4	7,8	Features of NC Machine tools, design consideration of NC machine tool, methods of improving machine accuracy.	Regular
5	9,10	CNC Machine elements: machine structures - Guide ways - feed drives-spindles- spindle bearings-	Regular
6	11,12	Measuring systems- tool mentoring systems. Any additional/remaining topics, discussing objective and previous year questions	Regular
		UNIT-II	
7	13,14	Tooling for CNC machines: interchangeable tooling system, preset and qualified tools, coolant fed tooling system,	Regular
8	15,16	Modular fixturing, and quick-change tooling system, automatic head changers.	Regular
9	17,18	NC part programming: manual programming-Basic concepts	Regular
10	19,20	Point to point contour programming, canned cycles, parametric programming.	Regular
11	21,22	Preparing part programs for Example parts	Regular
12	23,24	Any additional/remaining topics, discussing objective and previous year questions	Regular
		UNIT-III	
13	25,26	Computer-Aided Programming: General information, APT programming, Examples.	Regular
14	27,28	Apt programming problems (2D machining only).	Regular
15	29,30	Contd.	Regular
16	31,32	NC programming on CAD/CAM systems, the design and implementation of post processors.	Regular
17	33,34	Introduction to CAD/CAM software, Automatic Tool Path generation.	Regular
18	35,36	Any additional/remaining topics, discussing objective and previous year questions	Regular
		UNIT-IV	
19	37,38	DNC Systems and Adaptive Control: Introduction,	Regular
20	39,40	Type of DNC systems, advantages and disadvantages of DNC,	Regular
21	41,42	Adaptive control with optimization, adaptive control with constraints,	Regular
22	43,44	Adaptive control of machining processes like turning, grinding.	Regular
23	45,46	Contd.	Regular
24	47,48	Any additional/remaining topics, discussing objective and previous year questions	Regular

Fig 2.8 Teaching Plan

To deliver the Course content according to Teaching Plan every faculty maintains the course file whose contents are listed belowFaculty has to maintain Course File that comprises of:

S.No	Title
1	Cover Page
2	Syllabus copy
3	Vision & Mission of the Institute
4	Vision & Mission of the Department
5	Pos and PSOs
6	Course objective and Course outcomes
7	CO PO mapping
8	CO PO Attainments
9	Pre-Requisites if any
10	Class Time Table
11	Individual Time Table
12	Lecture Schedule with methodology been used
13	Lesson Schedule
14	Detailed Notes
15	Additional Topics
16	University Question Papers of Previous Years
17	Question Bank
18	Assignment Questions
19	Mid Vise Question papers, Keys and Answers
20	Tutorial Problems
21	Known Gaps if any
22	Discussion if any
23	References
24	Students list with slow learners and advance learners

B.	Use of Various Instructional methods and pedagogical initiatives

The Following are the innovative tools used by the Faculty in Teaching and Learning Process

1. **Group Assignment/ Project**

Instructors can structure a Group Assignment so that each member of the group must submit the assignment or the Group Assignment can be structured so that any member of the group can submit for the entire group.

2. **Models & Charts to give better grasping**

Instructors can use different charts to explain the algorithms and various models in technical oriented concepts that can create an awareness regarding their academics

3. **Role Play**

Faculty members are using role playing and scenario analysis based teaching as another Innovative method. Instructors can supplement their teaching methods with role playing in any context where it seems relevant. Even rehearsals of personal situationsthrough role playing with a trusted friend can provide beneficial learning opportunities.

4. **Guest Lectures**

Our Department encourages guest lecturers to motivate the Students and also improve the thinking knowledge related to the current trends in technology.

5.E-class Room

Faculty is using E-class room for interactive session. LCD Projector is used for demonstration, video (NPTEL), audio of classes. The faculty members are using multimedia elements such as Tabs and LCD projectors in the classroom. It will help the faculty members torepresent the content in a more meaningful way using different media elements.

Due to current ongoing Pandemic situation across the whole world , Faculty is using different online teaching platforms such as ZOOM, MS TEAMS, GOOGLE MEET etc

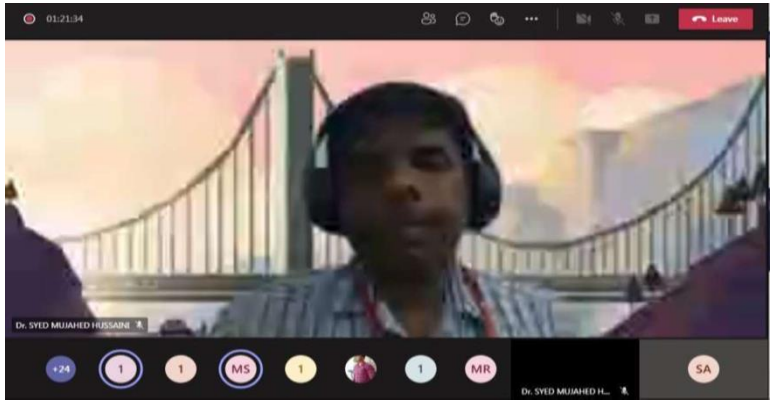


Fig 2.11 E-Class Room

6. Quizzes

A quiz can function throughout a course as an informative feedback device allowing both the instructor and the Students to see where they are excelling or need more focus. In order to effectively create Exams and **quizzes**, it is important to establish and understand the learning objectives that are being measured.

7. Soft Skill Class

Understanding the need of one's personality enables an individual to act more genuinely and effectively in a team environment. Students are encouraged to deliver presentations in the class which help them to develop ability to gather information, make decisions and interact with others. Soft skills classes empower Students with confidence, boldness, expressiveness etc. Also the Studen personality is developed overall.

C.	**Methodologies to support weak Students and encourage bright Students**

The Coordinator regularly conduct meetings regarding progress of their mentors and are responsible to identify Students who scored less than 60% Marks in their internals. Under the HOD direction, the coordinator evaluates the progress card of those Students who score below 60% Marks in three or more subject and below 75% attendance are considered as **academically weak Students** and same is also intimated to their parents.

Methodology to support weak Students: The Department has a well-defined process of monitoring, guiding and assisting slow learners (weak Students). Teachers attempt to enhance the performance of weak Students as follows:

- Care is taken by the faculty in monitoring the performance of slow learners, the Students deviations from studies is observed by the respective section class teacher and corrective measures are suggested.
- The faculty also goes a step ahead and has periodic interaction with the parents about the performance of slow learners.
- A blended motivation and responsibility from both parents and faculty will create a positive mindset and will help to overcome the inabilities and hurdles faced by the slow learners.
- Every parent is informed about the Marks and the Attendance.
- Regular counseling and providing moral support to them by counselor. For each counselor around 20 Students
- are allotted for counseling. Additional coaching is given to slow learners through Remedial classes.
- Tutorial classes are conducted by the faculty for those Students who have failed in
- any subject. Students are counseled for regular attendance.
-

Methodology to support bright student:

- The bright Students are identified based on their overall performance and their orientation towards Academics.
- The Department of Mechanical Engineering always has the culture of encouraging bright Students by providing them necessary guidance and moral support.
- Encouraging them to score good percentile in their final Examination by providing special and
-

challenging assignments. Encouraging them to participate in seminars/conferences in different institutes.

- Encouraging them to participate in state and national levels quiz and debate competitions.
- Students are encouraged to present their ideas in Workshops, Seminars, and Competitive Exams and
- also in various events.Encouraging them to guide their weak classmates. Teaching others make them more perfect.

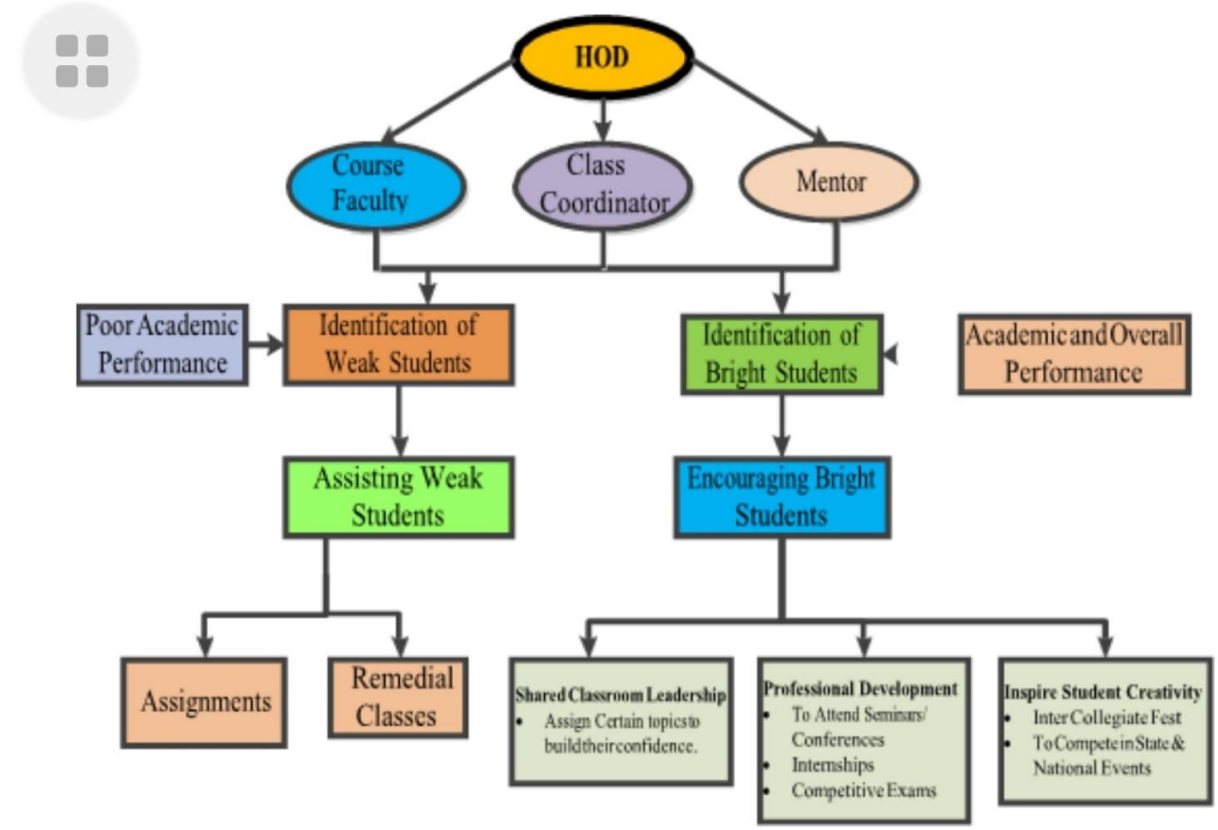


Fig 2.13 Process for Encouraging Bright Students and Assisting Weak Students

Impact analysis:

The following are the positive outcomes observed after adopting the above-mentioned Innovative Teaching Learning Process (TLP):

- Improved attendance of Students for
- every class. Improved Pass Percentage.
- Achieving awards and rewards for their participation in and
- outside the campus. New view points and new project ideas are derived in class.
- Better bondage between Students and
- faculty. Appreciation from the parents.

D.	**Quality of classroom teaching (Observation in a class)**

- Faculty maintains Teaching plan, Tutorial classes list, Teaching notes, Attendance registers, teaching diaries
- relative to their subject. Duration of each Theory Session is 50 minutes, Laboratory session is 3 Hrs.
- The faculty of Department adopts various innovative Teaching & Learning methodologies to create the best learning environment for Students.
- Lectures are delivered to Students as per teaching plan.
- Faculty provides brief summary of last class before the start of new topic.
- Computers are used for teaching purposes and internet facility is available to Students and faculty.
- Faculty members are taking advantage of sources like National Program on Technology Enhanced Learning (NPTEL), internet sources for effective teaching.
- ICTs are used for teaching purposes.

E.	**Conducts of Experiments (Observation in Lab)**

- Course coordinator along with the faculty are involved in preparation of Laboratory manual.

- The Mechanical Engineering Laboratories are conducted in duration of 3 hours with the faculty demonstrating the procedure of the experiment.
- Two faculty members and one instructor are assigned for each lab session. This guides the Students to understand and perform experiment easily.
- The Students perform the experiment and note the output of the program in the observation book.
- The performance of each student in the laboratory during the three-hour laboratory session is
- evaluated for 10 Marks. The executed experiment is documented by the Students in the record book and is evaluated for 5 Marks.

- Each student prepares a lab Record which is assessed by the teacher before commencement of the next practical.
- In each laboratory, the Students are trained to perform experiments on content beyond syllabus for better understanding/performance and to meet the industry requirements.
- The Internal Laboratory Exam is evaluated for 10 Marks.
- The total Internal Assessment is evaluated for **25 Marks** (Day to Day Performance **(10M)** + Record **(5M)** + Internal Exam **(10M)**).

As per the University, Curriculum stipulates a Minimum of 2 laboratory courses or a Maximum of 4 laboratory courses per semester from **I to VII** semester. As per the University guidelines 10 12 experiments are to be conducted. Students carry out more than the required number of experiments, beyond the minimum specified by the University.

F.	**Continuous Assessment in the Laboratory**

Continuous Assessment system is also implemented for assessment of laboratory work. The Assessment is done on the basis of Day to Day Performance, Laboratory Record and Internal Lab Examination.

JNTUH LAB ASSESSMENT

S.No	Day to Day Performance	Record Assessment	Internal Lab Examination	TOTAL
1	10 Marks	5 Marks	10 Marks	**25 Marks**

OU LAB ASSESSMENT

S.No	Day to Day Performance	Record Assessment	Internal Lab Examination	TOTAL
1	10 Marks	10 Marks	10 Marks	**30Marks**

G.	**Student feedback of teaching learning process and actions taken**

Student feedback is collected twice in a semester. Students fills a feedback- form apprising the faculty using a scale of 1 (low) through 5 (high) which helps in continuously monitoring and improving Teaching Learning Process.

Student Feed Back Form Sample

NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE – New Delhi, Affiliated to JNTUH Hyderabad)
New Malakpet, Hyderabad 500024

MECHANICAL ENGINEERING DEPARTMENT

Dear student,

Please rate the teaching quality of each of ten criteria by marking 5,4,3,2,1 by marking in the rectangular box given below:

Please Note: 5: Excellent/Outstanding 4: Very Good 3: Good 2: Average 1: Bad/Poor

COURSE:	B.TECH	YEAR	II	SEMESTER	II	SEC		DATE	

S.No		DOM	FMHM	MD	MP	BEFA	KOM&DOM LAB	FMHM LAB	MP LAB	ES
1.	Subject Knowledge									
2.	Ability to teach in a clear and understandable manner									
3.	Starting and ending class on time									
4.	Syllabus Coverage									
5.	Solving/Explaining of Imp/Previous Questions in Class									
6.	Doubt clarifications									
7.	HomeWorks/Assignments									
8.	Language used for explanation									
9.	Behavior with students									
10.	If any other thing, please specify									

Fig 2.15 Class Room Feedback from Students in written format

Analysis of Student Feedback:

- Counseling by the respective HoD for those faculty members who have secured low scores and negative comments, if any, in the feedback. This motivates them to improve their skills and abilities.
- If required training / orientation Programs are conducted by professional experts to master the skills of the faculty members in the nuances of teaching, thus improving the efficiency of teaching-learning process.

Quality of internal semester Question papers, Assignments and Evaluation (20) Institute Marks : 20.00

2.2.2	**Quality of internal semester Question papers, Assignments and Evaluation.**	**20**

A.	**Process of internal question paper setting, evaluation and effective process implementation**

- Subjective Tests Questions (I & II) are framed as per the COs.
- The Department Examination Section monitors the smooth conduction of Subjective Test in the Department.

Process of Subjective Test

1. Two Mid Exams are conducted per semester.
2. Each Mid Exam covers half of the syllabus.
3. For every 8 weeks 1 Subjective Test is conducted.
4. For each subject, Assignment questions are prepared for all the units.
5. While setting the question paper all previous University Exam papers are taken into consideration.
6. According to level of toughness the questions are prepared (viz., analyzing the problems, implementation of modern tools, formulating the problems etc).
7. Question paper and objective is prepared using blooms taxonomy and mapped with COs.
8. The questions will be of three categories:
    a. Some of the questions is direct and can be answered by all Students.
    b. Some of the questions need analysis and use of content covered as per syllabus.
    c. Remaining one third of the question is knowledge based. Certain amount of thinking, analysis and mathematical knowledge is required to resolve.

9. Each question comprises of 4 questions out of which 2 have to answered.
10. The Duration of the test is 90 Minutes and STT carries 10 Marks.
11. The internal quiz Exam is conducted for **10 Marks**.
12. The Department conducts assignments in the respective subjects for **5 Marks**.
13. The assignments may be solving problems, home assignment or slip test.
14. The total internal evaluation is the sum of Internal Subjective Test, Objective Test and Assignments **(10+10+5=25)**.
15. Second Subjective Test Assessment is also done similarly.
16. The Marks are uploaded to the University and average of the two is considered.

After conduction of assignments the test post activities are done:

1. All the results are placed in the Examination section website.
2. The progress reports are sent to their parents.
3. The slow learners are identified by counselors based on the Internal Marks and recommended for Tutorial / remedial classes.

Evaluation:

- Each course coordinator in consultation with Department Academic Committee prepares the question paper. Department Academic Committee verifies the quality of Question paper in all aspects and submits to the Department Internal Exam Section.

Assignments:

- Assignments are conducted periodically and evaluated by the respective faculty members.
- In order to bridge the gap in Curriculum, bright Students are given some assignments in the content beyond syllabus.

Effective process implementation

- The Department Academic Committee will conduct the question paper review meeting to verify the quality of question papers and approves them for the conduction of Internal Exams.

B.	**Process to ensure questions from outcomes / learning level perspectives**

- Department Academic Committee ensures that each question is mapped with COs in the Question paper. Student who answered to particular question is taken into consideration and average of Marks is taken for CO PO attainment.

C.	Evidence of COs Coverage in class test/Mid-term test

The below sample paper represents model paper for the subjective test (Mid-Term Test).

I

NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING & TECHNOLOGY

New Malakpet, Hyderabad-500024

II-B.E II-SEM MID-I EXAMINATION Aug – 2021

BRANCH: MECH **MARKS:20**

SUBJECT: KOM **TIME: 60MINS**

Note : Q1 in part A is compulsory and answer any two full questions from part B.

PART A

Q1

a	Differentiate between mechanism and machine. ?	L2	CO1	1M
b	What is meant by mobility?	L1	CO1	1M
c	State Grashofs law.	L3	CO1	1M
d	State law of gearing.	L3	CO2	1M
e	What is interference ?	L1	CO2	1M
f	classify cams.	L4	CO2	1M

PART B

2	Explain the inversions of single slider crank chain mechanism.	L2	CO1	7M
3	a. Explain Peaucellier mechanism.	L2	CO1	3M
	b. Differentiate Davis and Ackermans steering mechanism.	L2		4M
4	a. Drive an expression for length of path of contact of gear	L3	CO2	3M
	b. A pinion having 30 teeth drives a gear having 80 teeth. The profile of the gears is involute with 20° pressure angle, 12 mm module and 10 mm addendum. Find the length of path of contact, arc of contact and the contact ratio.	L4		4M
5	In an epicyclic gear train, the internal wheels A and B and compound wheels C and D rotate independently about axis O. The wheels E and F rotate on pins fixed to the arm G. E gears with A and C and F gears with B and D. All the wheels have the same module and the number of teeth are : TC = 28; TD = 26; TE = TF = 18. **1.** Sketch the arrangement ; **2.** Find the number of teeth on A and B ; **3.** If the arm G makes 100 r.p.m. clockwise and A is fixed find the speed of B ; and **4.** If the arm G makes 100 r.p.m. clockwise and wheel A makes 10 r.p.m. counter clockwise ; find the speed of wheel B	L4	CO2	7M

NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING AND TECHNOLOGY

New Malakpet, Hyderabad 500024

IV-I SEMESTER B.TECH MID-I EXAMINATION September 2019

BRANCH: Mechanical Engineering **Date: 16/09/2019**

SUBJECT: CNC Technology **Time: 60 minutes**

I. Answer any two of the following questions. **2X5=10**

Q.No	Questions	Bloom's Level	CO
1.	a) What are the advantages of NC system? b) Classify NC system?	L1,L2	CO1
2.	a) Distinguish point to point and continuous path CNC control. b) What is feed drive? Explain Mechanical transmission system in feed drive?	L3,L1	CO1
3.	a) What is interchangeable tooling system? b) Compare coolant fed tooling system and modular tooling system?	L1,L2	CO2
4.	a) What are G and M codes? b) State the significance of – G01, G04, M06 and M03 in part programming.	L1,L2	CO2

Fig 2.16 Sample Internal Subjective Test Question Paper

NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING AND TECHNOLOGY
IV B.Tech. I Sem., I Mid-Term Examinations, November-2019
CNC Technology
Objective Exam

Name: _____ **Hall Ticket No.** | | | | | | | | | | |

Answer All Questions. All Questions Carry Equal Marks. **CO1& CO2**

Choose the Correct alternative:

1) DNC system uses _____communication system. [ ]

a) single way b) two way

c) three way d) none

2) _____is omitted in DNC system [ ]

a) tape reader b) central computer

c) control unit d) part program

3) How many temporary storage buffers are used in BTR system _____ [ ]

a) one b) four

c) two d) six

4) In adaptive control system_____ is automatically adopted. [ ]

a) speed b) feed

c) both a,b d) none of the above

5) Adaptive control with optimization is a _____ control system. [ ]

a) Open loop b) closed loop

c) Both a,b d) none of the above

6) Online measurement of _____ is the drawback of ACO [ ]

a) Tool wears b) speed

c) Feed rate d) tool temperature

7) Benefit of adaptive control system [ ]

a) Increase production rate b) increased tool life

c) Less operator intervention d) all the above

8) The potentiometer is a variable _____ divider [ ]

a) Current b) voltage

c) Temperature d) resistance

9) Numeric display consists of _____ rectangular LED [ ]

a) 5 b) 6

c) 7 d) 8

10) for 8031/8051microcontroller what is the maximum power dissipation rating? [ ]

a) 5W b) 10W

c) 2W d) 1W

II. Fill in the blanks:

11) Direct Numerical Control (DNC) is a system that uses a _____ to control several machines at the same time

12) Geometric adaptive control is used in _____ operations.

13) _____ is use to detect and measure light.

14) _____ is software that converts assembly language source code into machine code.

15) the internal paths along which digital signal flows are called _____.

16) _____ can used to time stamp events and measure intervals.

17) Position encoders are used to determine _____ of moving objects.

18) The equate directive EQU is used to define a _____

19) _____ is an input to a processor that indicates the occurrence of an event.

20) Port 0 in 8051 microcontroller is _____ I/O.

D.	**Quality of assignment and its relevance to COs**

- Assignments questions prepared on the relevance of COs are given to the Students for assessing their knowledge formation about different topics which is structured and is mentioned in the course file.
- The Students has to write it & submit within a week and each question is mapped with COs. So the Students will be able to understand Course Outcomes of particular subject.
- Assignments are conducted periodically and evaluated by the respective Faculty members.
- Assignments may be given in the form of Surprise tests, quiz, gathering information from video links, solving
- problems and home assignments. In order to bridge the gap in Curriculum, bright Students are given some assignments in the content beyond syllabus.
- Assignments are used as a tool for practice.

ASSIGNMENT-1
KOM

S.No	Question	Blooms Taxonomy Level	Course Outcome
	UNIT-I		
1	a) Define link and kinematic pair. b) Enumerate the inversions of double slider crank chain mechanism.	L1	CO1
2	a) Define machine and mechanism. b) Enumerate the inversions of single slider crank chain mechanism	L1	CO1
3	a) Explain the quick return motion mechanism of crank and slotted lever. b) The length of the fixed link in a crank and slotted lever quick return mechanism is 300 mm and crank is 110 mm. Determine the inclination of the slotted lever with the vertical in the extreme position.	L1	CO1
4	a) Identify the difference between a machine and a structure. b) Classify kinematic pairs.	L1	CO1
5	a) Explain the Whitworth quick return motion mechanism. b) In a Whitworth quick return motion mechanism, the distance between the fixed centers is 50 mm and the length of the driving crank is 75 mm. The length of the slotted lever is 150 mm and the length of the connecting rod is 135 mm. Find the ratio of time of cutting and return strokes and also the effective stroke.	L1	CO1
6	a) Define machine and structure. b) Explain different types of constrained motions.	L1	CO1
7	a) Explain the function of Oldham's coupling. b) Prove that the elliptical trammel describes an ellipse.	L1	CO1
8	a) Define inversion of a mechanism? b) Explain the inversions of a quadric cycle chain?	L1	C01
9	a) Explain Grubler's criterion. b) Identify the degrees of freedom for four bar mechanism, slider crank mechanism and five bar mechanism.	L1	C01
10	a) What is meant by degrees of freedom of a mechanism? b) Explain the applications of Kutzback criterion to plane mechanisms.	L1	CO1

	UNIT-II		
1	a) Mention different types of instantaneous centres. b) Locate the instantaneous centres for crank and slotted lever quick return mechanism?	L2	C02
2	a) Define Instantaneous centre b) Locate all the Instantaneous centers of slider crank mechanism with crank length of 25mm rotating clockwise at a uniform speed of 100 rpm. The crank makes 45^0 with IDC and the connecting rod is 400 mm long .Determine the velocity of the slider and the angular velocity of connecting rod?	L1,L3	C02
3	a) State and explain the Kennedy's theorem. b) In a slider crank mechanism, the crank OA makes 400 rpm in the counter clockwise direction which is 60^0 from IDC. The lengths of the links are OA= 60 mm, OB= 220 mm and BA= 280 mm. Determine the velocity and acceleration of the sliderB?	L1,L3	C02
4	a) Explain Klien's construction for determining velocity and acceleration of slider crank mechanism. b) Explain the method of determining the Coriolis component of acceleration in crank and slotted lever quick return mechanism?	L1	C02
5	Determine the velocity and acceleration of the link QR and RS in a four bar mechanism in which PQRS is a four bar mechanism with fixed link PS. Crank PQ rotates uniformely and makes an angle of 60^0 with PS in anti clockwise direction.. The length of the links are PQ=62.5 mm, QR= 175 mm, RS= 112.5 mm and PS= 200 mm. Crank PQ rotates at 10 radians/ second?	L4	C02
6	a) Define centrode and axode. b) Derive the analytical method of determination of velocity and acceleration for a slider crank mechanism?	L1	C02
7	a) Explain how the acceleration of a point in a link is determined when the acceleration of some other point on the same link is given in magnitude and direction. b) Draw the acceleration diagram of a slider crank mechanism.	L2	C02
8	a) What is acceleration image? b) Draw and explain the velocity diagram of Whitworth quick return mechanism by assuming suitable proportions.	L4	C02
9	Derive an expression for the magnitude of Coriolis component of acceleration.	**L2**	C02
10	a) What is the practical significance of evaluating velocity and acceleration of members of a mechanism? b) Assuming suitable proportions determine the velocity and acceleration of a slider in Toggle mechanism.	L3	C02

Assignment-II
CNC Technology

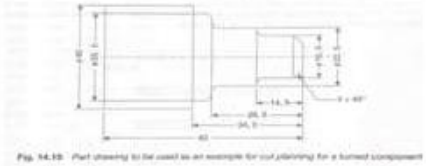
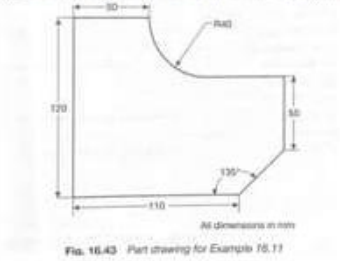
<table>
<tr><th>Q.No</th><th>Questions</th><th>COs</th></tr>
<tr><td>1.</td><td>a) Prepare a complete manual part program for the figure shown. This part is to be machined from a rolled stock of 40mm diameter.
Process plan for the component is
<table>
<tr><th>Operation</th><th>Description</th><th>Tools</th><th>Cutting speed m/min</th><th>Feed mm/min</th></tr>
<tr><td>10</td><td>Facing</td><td>T01,Facing Tool</td><td>200</td><td>0.30</td></tr>
<tr><td>20</td><td>Roughing Turning</td><td>T02,Roughing Tool</td><td>200</td><td>0.35</td></tr>
<tr><td>30</td><td>Finish Turning</td><td>T03,Finishing Tool</td><td>300</td><td>0.20</td></tr>
</table>

b) Explain the four types of statements in a complete APT part program.</td><td>CO3</td></tr>
<tr><td>2.</td><td>a) Prepare a complete APT part program for the following component shown in figure using an end mill cutter of 20mm diameter. Clearly show the axes system chosen with a sketch and the direction of the cutter for the motion statements.
 
b) Define Automatic tool path generation using CAD/CAM.</td><td>CO3</td></tr>
<tr><td>3.</td><td>a) Distinguish between Adaptive controls with optimization (ACO) and Adaptive control with constraints (ACC) with block diagram.
b) Explain the working of BTR system and Special Machine control unit in DNC system.</td><td>CO4</td></tr>
<tr><td>4.</td><td>a) Explain the modules typically found in a Microcontroller with basic layout.
b) Draw PLC system and explain the basic functional components of it.</td><td>CO4</td></tr>
</table>

Fig 2.17 Sample Assignment Questions with CO Mappings

Quality of student projects (25) Institute Marks : 25.00

2.2.3	**Quality of Student Projects**	**25**

Initiatives

Project work is done by the final year Students during their II semester as a part of their Program Curriculum. It carries 200 Marks & 15 credits. As per the University norms 50 Marks are awarded for Internal Evaluation and 150 Marks for External Viva Voce. (University Examination).

PROJECTS IDENTIFICATION:

- Students are provided with brief orientation on various fields to select the Project.
- Details of previous projects are displayed at notice board which ensures no repetition of project work and also encourages the Students to
- enhance the previous works. Provides the Faculty list with their specialization details along with the area of interest to guide the projects.
- The knowledge, skill set and interest of the Students to implement the project are considered to
- undertake the project work. The Student Projects are selected in line with Department Vision, Mission, and Program Outcomes mapping.
- Projects are identified to relevant context. The need for the project and the end users of the project are verified based
- on the current context. Allotment of a guide for each batch is done based on the common interest of the guide and student's interest.

Implementation

- The project domains, rules and regulations, instructions are defined to the Students by the Project Coordinator.
- A project coordinator is appointed by the Head of the Department who is responsible for Planning, Scheduling and Execution of all the activities related to the studentproject work.
- Project coordinators issue the project schedule to the Students and the guides.
- Project Review Committee is constituted with HOD, two senior Faculty members of the Department, and Project Coordinators. The Project Review committee is responsible for maintaining the Quality in the Students projects by reviewing the Students progress periodically, and considering the quality factors.

Projects are offered in various specializations as per the faculty expertise areas (as mentioned below)

1. Design and analysis of a mechanical component
2. Prototype of any mechanical object or machine.
3. Refrigeration and Air conditioning
4. Solar energy/wind energy/renewable energies.
5. Degradation and recycling of plastics
6. Nano technology
7. Eco friendly electric vehicles.

8. Bio compatible materials and design.
9. Automation and Robotics.
10. Mechanization of Agriculture

Impact Analysis

- New innovative ideas are born for project work.
- Skills or abilities of Students improved.
- Knowledge on various aspects of project management was
- developed. Confidence level of the Students was boosted.
- Improved teamwork spirit.
- Implementation and deployment of the project for social
- benefits. Document preparation and presentation.
- More tendencies to showcase their project work in project exhibition were observed.

A.	**Identification of projects and allocation methodology to Faculty Members**

- Every Final year (VIII semester) student undertakes project which is spread over a period
- of 4 Months. Students are divided into four categories based on their percentages.
- Project batch consists of Students with highest and medium and lowest grades because there could be chance of interaction
- between all the Students. The Students are divided into 29 batches based on their strength with each batch comprising of four Students, one from each category.
- The student with highest percentage among the batch is the team leader.
- Project Guides are appointed by Project Coordinator along with the Head of the Department based on
- their area of expertise. Project Guides are responsible to monitor and guide all the Project activities of the concerned batch.
- Students meet their respective project guide and will discuss about project areas, interests and will finalize the Project Title.
- Students with the guidance and approval from their respective project guide and project review committee submit project titles
- to project coordinator. Students are asked to submit soft and hardcopies of abstracts to the Project Coordinators.
- Every batch has to get guide's acceptance letter before starting their project work and submit the same
- to project coordinator The Guides may be allotted one or two batches based on their research experience.
- The Knowledge, Methodology, Skill set and Interest of the Students to implement the project are considered to undertake the projects.
- The Students thereafter in consultation with Guide select a topic. The Students then perform literature survey, formulate the problem
- individually and then proceed further. Projects may be theoretical or experimental.
- A well-planned Project Work Schedule of events is prepared by project coordinator which is communicated to all the Students and project

guides.

NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING & TECHNOLOGY
New Malakpet, Hyderabad-500 024

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2020-2021

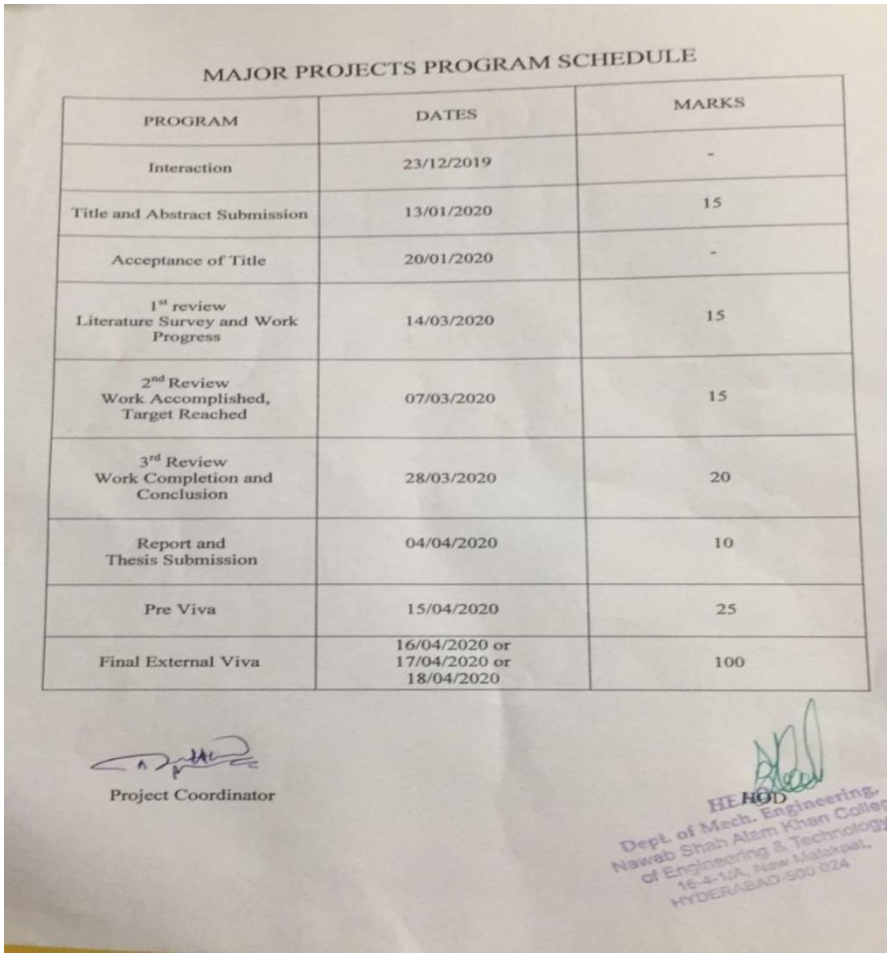
MAJOR PROJECTS PROGRAM SCHEDULE		
PROGRAM	DATES	MARKS
Interaction	27/03/2021	-
Title and Abstract Submission	03/04/2021	15
Acceptance of Title	05/04/2021	-
1st Review Literature Survey and Work Progress	10/04/2021	15
2nd Review Work Accomplished, Target Reached	24/04/2021	15
3rd Review Work Completion and Conclusion	15/05/2021	20
Report and Thesis Submission	05/06/2021	10
Pre-Viva	05/06/2021	25
Final External Viva	12/06/2021	100

PROJECT CO-ORDINATOR

H.O.D

HEAD
Dept. of Mech. Engineering
Nawab Shah Alam Khan College
of Engineering & Technology
16-4-1/A, New Malakpet
HYDERABAD-500 024

A Sample Project Work Schedule of events is shown in **Fig 2.18**.



MAJOR PROJECTS PROGRAM SCHEDULE

PROGRAM	DATES	MARKS
Interaction	23/12/2019	-
Title and Abstract Submission	13/01/2020	15
Acceptance of Title	20/01/2020	-
1st review Literature Survey and Work Progress	14/03/2020	15
2nd Review Work Accomplished, Target Reached	07/03/2020	15
3rd Review Work Completion and Conclusion	28/03/2020	20
Report and Thesis Submission	04/04/2020	10
Pre Viva	15/04/2020	25
Final External Viva	16/04/2020 or 17/04/2020 or 18/04/2020	100

Project Coordinator

HOD

Dept. of Mech. Engineering
Nawab Shah Alam Khan College
of Engineering & Technology
16-4-1/A, New Malakpet,
HYDERABAD-500 024

Fig 2.18 Project Work Schedule

- The above mentioned points are represented for simplicity in the form of a flowchart :

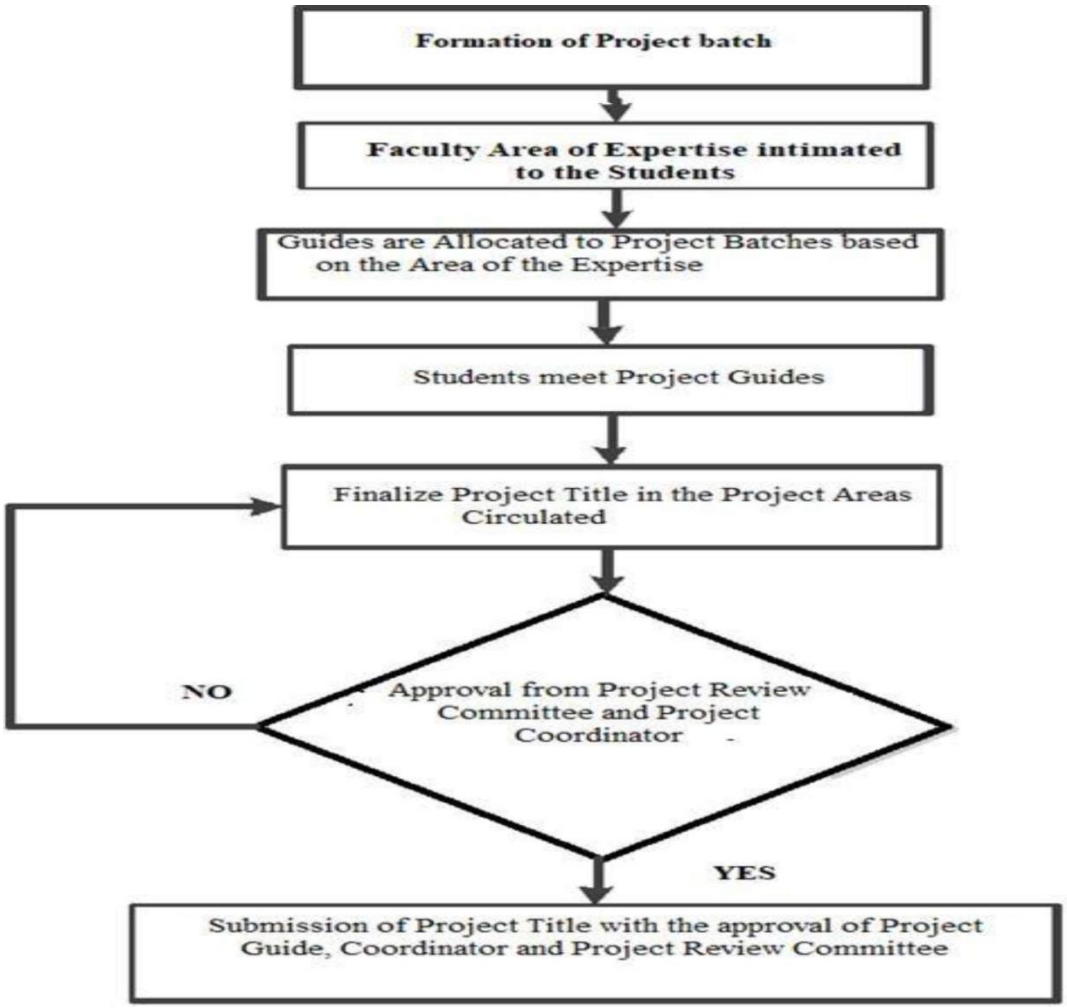


Fig 2.19 Flow Diagram for Showing the Process of Student Project Batch Allocation

B.	Types and relevance of the projects and their contribution towards attainment of POs and PSOs.

In the Department of Mechanical Engineering, Students choose their projects, which are broadly categorized as,

- **Industry projects:** Under this category the project is performed in an industry to fulfill their needs. Department also provides a guide to monitor their progress.
- **In-house projects:** Under this category project is performed by the group of Students in the institute under the super Vision of the guide.

Further the Department provides flexibility for Students to select the project in any one of the following categories.

- **Application Oriented:** In this category, projects are performed where the target is to achieve any real-life application.
- **Product Oriented:** In this category, design and application is performed from the scratch. In this category, each iteration of design, Algorithm, testing and process the product.
- **Research Oriented:** In this category, extensive review of literature is done, which aims to learn new methods or procedures to validate results.

Following factors are considered (but not limited) to classify projects in above categories Environment, Safety, Standards and Cost.

Relevance of the projects and their contribution towards attainment of POs and PSOs.

Project Coordinator identifies the Course Outcomes after consultation with the Project Review Committee and Guides for the Project work. The following are the Course Outcomes Specified for the Project Work:

CO 1: Recognize a real-world problem and develop its requirements and develop a design solution for a set of requirements. Develop a design solution for a set of requirementsFormulate a real-world problem and develop its requirements. Develop a design solution for a set of requirements

CO 2: Test and validate the conformance of the developed prototype against the original requirements of the problem.

CO 3: Express technical and behavioral ideas and thought in oral settings.

CO 4: Express technical ideas, strategies and methodologies in written form, Prepare and conduct oral presentations.

CO-ID	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	1	3	2	2	1	1	-	3	3	1	1	2	-	1
CO2	2	2	2	3	1	1	1	-	3	3	2	1	-	2	1
CO3	1	2	1	1	-	1	1	-	2	3	1	-	2	1	1
CO4	1	2	1	1	-	1	1	-	2	3	2	-	-	1	1

C.	**Process for monitoring and evaluation**
D.	**Process to assess individual and team performance.**

Continuous Monitoring:

- Project Students should meet their respective guide daily once and are asked to explain their progress they have done in their project. In case of Industry projects, project Students should meet their respective guide weekly once and are asked to explain their progress they have done in their project.
- The Project Guide monitors the progress done by the student in that week and help them to go
- with project work. Project guide will assess each student in team and make them work in right way.
- A project coordinator is appointed by the Head of the Department who is responsible for planning, scheduling and execution of all the activities related to the student project work.
- Project Review Committee members are responsible for making the regulations for complete evaluation process:

Evaluation Guidelines for Projects:

All projects are evaluated by conducting three reviews and Pre Viva. The Criteria for conducting the evaluation process are given in the **Table 2.5**

Table 2.5 Evaluation Procedure

S .No.	Topics to be covered in the Project	Marks
1	Title and Abstract submission	15
2	1st review: Literature Survey and Work Progress	15
3	2nd Review: Work accomplished, Target reached	15
4	3rd Review: Work completion and Conclusion	20
5	Report and Thesis Submission	10
6	Viva	25
	Total Marks	100/2=50

E.	Quality of completed projects/working prototypes

Assessment of projects is done considering factors such as

i. the state-of the-art technology used in execution,
ii. their relevance to society, industry and academics,
iii. the use and development of theoretical and experimental methods, and
iv. The coverage of broader areas of the latest technologies.

Final project demo for the working prototype and the report is evaluated by a Team consists of Project Review Committee.

- The projects are evaluated and are awarded Internal Assessment Marks for a
- Maximum 50 Marks. At the end of final year, as per the University schedule, final Viva-voce is arranged.
- Students demonstrate their project in front of a panel consisting of:

- Internal Project Guide
- External Academia/Industry Personnel
- Department Project Coordinator
- Working prototype, testing results, validation done is presented and judged by the panel.

MAJOR PROJECT LIST 2020-2021				
Sl.No	Hall Ticket No. of the Students	Name of the Students	Name of the Faculty Guide	Title of the Project
1	16E01A0355	SYED ABDUL HAQUE ALI	Mr. MD Naser	Energy Harvesting through Exersise
	16E01A0360	SHAIK MOHD IMRAN MALIK		
	15E01A0357	MOHD AMIR ALI		
2	15RT1A0337	MOHAMMED ABDUL AZEEM	Mr. Mirza Haroon Baig	Power Generation in Railway Track by using Mechanical Motion.
	15RT1A03C2	SHOEB ALI KHAN		
	16RT1A03E3	ALEEM AQTER SIDDIQI		
	17RT1A0344	MOHAMMED INZEMAMUDDIN		
3	16E01A0302	GOLAM MORTUJA	Dr. S.M. Hussaini	Design and Fabrication of 2 Wheel Drive for Industrial Fork Lift
	16E01A0329	SHAIK AWAIS		
	17RT1A0348	MOHAMMED KHADER JILANI		
	17RT1A0367	MOHD ABDUL RAHMAN		
4	16E01A0361	MOHD ZAKIUDDIN	Mr. Abdul Jabbar	Design of Air Conditioning System for Hospitals.
	16E01A0368	ALMAS AHMED SAYEED		
	16RT1A0383	MOHAMMED NAYEEM		
	17RT1A0329	MOHAMMED ADNAN HUSSAIN		
5	16RT1A0316	MIR MUJTABA ALI	Mr. Mohammed Taher	Heat Load Calculation for Commercial Building using HAP.
	16RT1A0355	MOHAMMED ABDUL FOUZAN		
	16RT1A03A4	SYED ADIL AHMED		
	16RT1A03B4	SYED MOHIUDDIN		
6	16RT1A0320	MOHAMMED ABDUL RAHEEM	Mr. Mohammed Aqeel Ahmed	Design and Analysis of Composite Aircraft Wing
	16RT1A0321	MOHAMMED ABDUL RAHEEM QUADRI		

	16RT1A0345	MOHAMMAD RAZI UDDIN		
	17RT1A0336	MOHAMMED ASAD AHMED		
7	17RT1A0301	ABDUL MANNAN BAIG	Mr Mirza Haroon Baig	Design and Analysis of Hellical Coiled Heat Exchanger
	17RT1A0311	HAMED BIN TAHER HARHARA		
	17RT1A0330	MOHAMMED ABDUL WAJID		
8	17RT1A0307	ARAFAT	Mr. Amer Ur Rahman	Fabrication of Electric Bicyle
	17RT1A0321	MIRZA FARHAN BAIG		
	17RT1A0326	MOHAMMED ABDUL HADI		
	17RT1A0328	MOHD ABDUL RAHMAN		
9	17RT1A0308	BILAL MOHAMMED ATEEQ	Mr. Shabbir Ahmed	Hybrid Power Generation from Solar and Wind Energy.
	17RT1A0334	MOHAMMED ABRAR HASSAN		
	17RT1A0342	MOHAMMED ILYAAS AKBAR		
	17RT1A0343	MOHAMMED IMRAN		
10	17RT1A0312	ISMAIL PASHA	Mr. Syed Shakeel Ahmed	Fabrication of Pneumatic Paper Cup Making Machine.
	17RT1A0327	MOHAMMED ABDUL JALEEL		
	17RT1A0341	MOHAMMED HYDER AHMED		
	17RT1A0360	MOHAMMED TAJ		
11	17RT1A0319	MIRZA AFROZ BAIG	Mr. Raza Ahmed Khan	Fabrication of Electric Scooter
	17RT1A0320	MIRZA AMAIR BAIG		
	17RT1A0331	MOHAMMED ABDUL WASAY		
	17RT1A0346	MOHAMMED JUNAID		
12	17RT1A0332	MD ABDULLAH GHORI	Dr. S.M. Hussaini	Thermo-Structural Design and Analysis of Hypersonic Cruse Missile Wing.
13	17RT1A0333	MOHAMMED ABIDULLAH ANSARI	Mr. Md Sharjeel Zeeshan	Electromagnetic Braking System
	17RT1A0338	MOHAMMED AZIZUDDIN		
	17RT1A0361	MOHAMMAD VASIUDDIN		

	16RT1A0346	MOHD SAMIUDDIN		
14	17RT1A0351	MOHAMMED MUHEEB UDDIN ASLAM	Mr. Shabbir Ahmed	Dual Axis Solar Tracking System
	17RT1A0356	MOHAMMED SHAHBAZ HUSSAIN		
	17RT1A0357	MOHAMMED SHAHER YAR KHAN		
	17RT1A0362	MOHAMMED YASSER		
15	17RT1A0366	MOHD ABDUL QAVI	Mr. Amer Ur Rahman	Fabrication of Air Operated Vice
	17RT1A0368	MOHD ABDUL RAHMAN		
	17RT1A0370	MOHD ARBAZ		
16	17RT1A0374	MOHD FAISAL HUSSAIN	Dr. Zahir Hasan	A Solution for Joint Pain and Other Diseases through portable Exercise Machine
	17RT1A0377	MOHD IMRAN UDDIN		
	17RT1A0383	MOHD PERVEZ		
	17RT1A0391	SALAH MOHD		
17	17RT1A0378	MOHD KHAJA	Dr. Noor Alam	Development of Solar Refrigerator Without Compresor
	17RT1A0382	MD OMAIR AHMED		
	17RT1A0393	SHAIK ABDUL OBAID		
	17RT1A03A8	SYED HUSSAIN AHMED		
18	17RT1A0379	MOHD KHALEEL UR RAHEMAN	Dr. S M Hussaini	Design and Analysis of Composite Car Bumper
	17RT1A0386	MOHD SULEMAAN ALI KHAN		
	18RT5A0318	MOHAMMED SHOAIB HUSSAIN		
19	17RT1A0381	MOHD NADEEM	Mohammed Aqeel Ahmed	Two-Bay crack Arrest Capability Evaluation in Metallic Fuselage
	17RT1A03A0	SHAIK SAMI UR RAHMAN		
	17RT1A03A2	SK MOHAMMED NAIFUDDIN		
	18RT5A0310	M.A. MUNAWAR		
20	17RT1A0389	MUSAIB MOHIUDDIN	Mr. Fazal Mohammed	Design and Fabrication of Stair Lift
	17RT1A03A5	SYED ALTAF UDDIN		
	17RT1A03A7	SYED FARDEEN ALI		

	17RT1A03B6	SYED NAIYYER HUSSAIN		
21	17RT1A0394	SHAIK ABDUL WASI	Mr. Raza Ahmed Khan	Design and Fabrication of Solar E-Bicycle
	17RT1A0395	SHAIK ASHRAF ALI		
	18RT5A0316	M.A.RAHMAN		
	18RT5A0326	MOHD SADIQ		
22	17RT1A03A6	SYED ESA GIBRAN	Mohammed Aqeel Ahmed	Design and Enhancement of Oxygen Concentrator Machine
	17RT1A03C1	SYED TALIB AZAM		
	17RT1A03B4	SYED MOHAMMED NADEEM		
	17RT1A03B8	SYED NOOR MOHAMMED		
	17RT1A03C0	SYED SUFIYAN MOHAMMED		
23	17RT5A0306	MD SUMER MOSITH	Ms. Tasleem Banu	Design and analysis of composite gear box casting
	17RT5A0328	SHAIKH SHAKEEL BABA		
	17RT1A03B5	SYED LATEEF		
	18RT5A0304	KAMA NAVEEN		
24	17RT5A0309	MIRZA MOHAMMAD ALI BAIG	Mr. Syed Sadat Ali	Design and Fabrication of Solenoid Engine
	17RT5A0314	MD NAUSHAD ULLAH		
	17RT5A0325	SHABAZ AHMED		
	17RT5A0326	SHAIK MOHAMMED		
25	18D95A0311	SYED MAAZ UDDIN	Ms. Tasleem Banu	Fabrication of Screw turbine for Electricity generation
	18RT5A0328	SHAHEDA MAHREEN		
26	18RT5A0315	MOHAMMED ABDUL KHALEEL	Mr. Md Rasheed	Design of central Air Conditioning System in College Building
	18RT5A0325	MOHD MOIZ UDDIN		
	18RT5A0308	MOHD ABDUL WASEEM		
	18RT5A0317	MOHAMMED IBRAHIM		
27	18RT5A0303	CHEGODI SHIVLINGA RAJU	Mr. Ahmed Hussain	Experimental investigation on CI Engine using tyre pyrolysis oil
	18RT5A0314	MD.SUFIYAN OUSAF		

	18RT5A0330	SAHIK.BASHEER		
	18RT5A0331	SHAIK UMAR SHARIEF		
28	18RT5A0304	HABEEB AHMED	Dr. Zahir Hasan	Friction Stir Spot Weldments by using similar metals
	18RT5A0311	SHOIEBKHAN		
	18RT5A0312	MD ABDUIL RAHMAN		
	18RT5A0302	AHMED ABDUL HAQUE		
29	18RT5A0301	ADIL MOHAMMED SAIFUL ISLAM	Mr. Fazal Mohammed	Development of Solar Water Heater
	18RT5A0305	IBRAHIM BIN HASAN		
	18RT5A0309	MD AIJAZ UDDIN		
	18RT5A0329	SHAIK AWAIS		
30	18RT5A0313	MOHAMMED FARDEEN FARAZ	Dr. Noor Alam	Heat Transfer Analysis on Rectangular plate by natural convection.
	18RT5A0307	KHALEEL AHMED		
	18RT5A0319	MOHAMMED SHOAIB KHAN		
	18RT5A0322	MOHD AMIR		
31	18RT5A0323	MOHD ASEEM UDDIN	Mr. MD Naser	Fabrication of Four Way Motorized Hacksaw
	18RT5A0324	MOHD AZMATH QADRI		
	18RT5A0327	MOHD SHOAIB ABBAS		

MAJOR PROJECT LIST 2019-2020

Sl No.	HT NO.	NAME OF STUDENT	TOPIC	GUIDE	REMARKS
1	16RT1A0326	MOHAMMED ARSHAD HUSSAIN	RECYCLING OFPLASTICS	DR. SYED MUJAHED HUSSAINI	
	16RT1A0348	MOHAMMED UZAIR AHMED			
	16RT1A0351	MOHAMMED ZUHAIB ALI			

2	16E01A0312	MOHD WASEEM KHAN	AGRIBOT,FARMER FRIENDLY AGRICULTURAL ROBOTDESIGN, ANALYSIS AND FABRICATION	DR. ZAHIRHASSAN	
	16E01A0335	MALIK MOHD SHAIK ABDULJABBAR			
	16E01A0338	MOHD MUSTAFA ALI			
3	16RT1A0347	MOHAMMEDSOHAIL	DEVELOPMENT FOR 3DPRINTER FOR POLYCARBONATE COMPONENT	DR. ZAHIRHASSAN	
	16RT1A0349	MOHAMMED ZAID			
	16RT1A0354	MOHD ABDULBASITH			
4	15E01A0349	MOHD ABDUL ADIL	HEATING OF WATER BYEXHAUST OF AC	MR. RAZA AHMED KHAN	
	15E01A0361	MOHAMMED SAMI HUSSAIN			
	15E01A0371	MOHD RAHEEMUDDIN			
	15E01A0372	MOHD MUSTAFA ALI			
5	17RT5A0315	MOHAMMED SAMI UDDIN	DESIGN OF AIR CONDITIONING SYSTEM REQUIRING ASTRICT HUMIDITY CONTROL	MR. RAZA AHMED KHAN	
	17RT5A0316	MOHAMMED SIDDIQ KHAN			
	17RT5A0317	MOHD AKBAR SHAREEF			
6	15RT1A0349	MOHD ABDUL QAYYUM DANISH	CFD ANALYSIS OF CONVERGENT NOZZLE	MR. MOHDABDUL MOYEED	
	15RT1A0382	MOHD ABDUL HAMZA RASHWAN			
	15RT1A03C8	SYED ISHAQ ALI			
7	15E01A0337		BOX SHIFTINGMECHANISM	MR. MOHDMANSOOR HASSAN(K)	
	16E01A0318	SYED ALI HUSSAINI			
	16E01A0320	MD MAHBUB ALAM			
	16E01A0303	SAHREYAR RAHMAN			

8	16E01A0309	MOTIUL HAQUE	FABRICATION OF MONO WHEEL BIKE	MR. SYEDSADAT ALI	
	16E01A0321	MD SHAHAB			
		HASHMI			
	16E01A0326	MOHD MERAJ			
9	16E01A0304	MOHAMMED TAJAMMUL SIDDIQ	AUTOMATED QUALITYCONTROL BY USING CONVEYOR SYSTEM	MR. MD UMAIRANSARI	
	16E01A0307	MOHD FARAZ KHAN			
	16E01A0328	MOHAMMED ABDUL BASEER			
10	16E01A0305	GUFRAN KHAN	DESIGN OF FIRE FIGHTING SYSTEM FORCOMMERCIAL BUILDING	MR. MOHAMMEDABRAR HUSSAIN	
	16E01A0308	MD NOMAN ALAM			
	16E01A0323	MOHSIN RAJA			
11	16E01A0310	ALIMULLAHANSARI	3D MODELING OF AIR DISTRIBUTION DUCTING SYSTEM FOR RESIDENTIAL BUILDING USING REVIT SOFTWARE	MR. MOHAMMEDAQEEL AHMED	
	16E01A0316	KHURSHID ALAM			
	16E01A0317	INSAF ALI			
12	16E05A0301	ZIYA UR RAHMAN	ROCKER BOGIE ROBOT	MR. SYED AMER UR RAHMAN	
	16E05A0304	MD RUMAN KHAN			
	16E05A0325				
13	16E01A0334	MOHD MOINUDDINSHAIBAZ	POWER GENERATIONTHROUGH WEIGHT LIFTING	MR. MDNASER AHMED	
	16E01A0347	MOHAMMED SHAIBAAZUDDIN			
	16E01A0366	MD SAMAD ALI			
14	16RT1A0302	ABDULLAH MOHD HASHIR	DESIGN AND FABRICATION OF ABRASIVE JET MACHINE	MR. MOHDABDUL MOYEED	
	16RT1A0313	MD MUZAFAR ULLAH KHAN			

	16RT1A0322	MOHAMMEDABDUL SHOKOOR			
	16RT1A0364	MOHD FAZAL UDDIN JUNAIDI			
15	16RT1A0325	MOHAMMED ASHAN ALI	DESIGN, STATIC &MODALANALYSIS OF SUSPENSION SYSTEM FOR FORMULA RACE CAR	MR. MOHAMMEDAQEEL AHMED	
	16RT1A0328	MOHAMMED ASIMUDDIN			
	16RT1A0337	MOHAMMED KHUNDMIRMEHDI			
16	16RT1A0329	MOHAMMED ATIF	DESIGN OF HVAC SYSTEM FOR COMMERICIAL BUILDING	MR. MOHDMANSOOR HASSAN(H)	
	16RT1A0331	MOHAMMED FAIZAN AHMED			
	16RT1A0350	MOHAMMED ZOHAIB RASHEED			
17	16RT1A0333	MOHAMMED HABEEBULLAH SHAREEF	FABRICATION OF E-BIKE	MR. MD UMAIRANSARI	
	16RT1A0334	MOHAMMED HASSAN KHAN			
	16RT1A0363	MOHD FAIZ AHMED			
18	16RT1A0310	MD KHAJA QUTUBUDDIN	CALLIBRATION AND TROUBLE SHOOTINGOF MUFFLE FURNACE	MRS. PRATIMAJOSHI	
	16RT1A0359	MOHD ABDUL KHADER			
	16RT1A0365	MOHD FAIZUL HAQUE			
19	16RT1A0370	MOHAMMED IBRAHIM	CNC PLOTTERMACHINE	MR. FAZAL MOHJAMMED	
	16RT1A0390	MOHD ZEESHAN ADAN			

	16RT1A03B1	SYED FAZLEHYDER			
20	16RT1A0378	MOHD MISBAHUDDIN MUJEEB	SOLAR POWEREDGRASS CUTTER	MR. MOHDMANSOOR HASSAN(H)	
	16RT1A0391	MUSHTAQ AHMED			
	16RT1A03B1	SYED FAZLE HYDER			
21	16RT1A0385	MOHD SALMAN MOIZ	PIPER INSPECTIONROBOT	MR. MIRZAHAROON BAIG	
	16RT1A0392	MUZZAKIR HASHAM			
	16RT1A03D0	SHAIKH MOHD ANAS			
22	16RT1A0394	SHAIK ABDUL IMRAN	VERTICAL AXIS WINDTURBINE	MR. MOHAMMED RAFEEQ	
	16RT1A0396	SHAIK MUJHED			
	16RT1A03C4	TARIQ HASAN B			
23	17RT5A0302	ABDUL QUALEQ	BIO DIESEL DEVELOPMENT PERFORMANCE EMISSION, COMBUSTION AND WEAR INVESTIGATIONOF IC ENGINE	MR. VINAYKULKARNI	
	17RT5A0319	MOHD JAVEED ALI			
	17RT5A0335	SYED RASHED			
24	17RT5A0308	MD ZUBAIRUDDIN	ROAD POWER GENERATION BY SLIDING MACHINE	MR. MOHAMMEDAZFAR HASHMI	
	17RT5A0311	MD JAWAD SHAREEF			
	17RT5A0313	MD ABDUL QUDDUS			
	17RT5A0331	SYED GHOUSE			

25	17RT5A0332	SYED MUKHTARUDDIN	PEDAL OPERATEDWASHING MACHINE	MR. SYEDSADAT ALI	
	17RT5A0310	MOHAMMED ADNAN			
	16RT5A0306	MD BARKATH ALI			
26	16E01A0319	MOHD AFROZ ALAM	RADIANT COOLINGSYSTEM WITH PERFORMANCE ANALYSIS	MRS. TASLEEMBANU	
	16E01A0339	MOHD ARSHAQ HUSSAIN SIDDIQUI			
	16E01A0363	MOHAMMED MUZAFFER			
27	16RT1A0303	AHMED ADNAN-UL-HUDA	DEVELOPMENT OF 3DPRINTER FOR ABS COMPONENTS	MR. MOHDABDUL MOYEED	
	16RT1A0307	M A TAYYAB			
	16RT1A0311	MD MAHOOB KHAN			
	15RT1A03B3	NASER BIN AHMED			
	15RT1A03B6	SHAIK AAFAQAKRAM			
28	16RT1A0372	MOHD JAFFER	CALIBRATION AND TROUBLESHOOTING OF HEAT EXCHANGERSETUP	MR. MOHAMMEDRAFEEQ	
	16RT1A0388	MOHD YOUNUS			
29	17RT5A0303	ABDUL YOUSUF KHAN	HYBRID POWERGENERATION	MR. SYEDSADAT ALI	
	17RT5A0307	MD SYED ALAM			
	17RT5A0322	MOHD NADEEM UDDIN			
	17RT5A0324	MOHAMMED FURQAN HUSSAIN			
	17RT5A0333	SYED NOUMANA ALI SUFIYAN			

S.No	ROLL NO	STUDENT NAME	PROJECT TITLE	PROJECT GUIDE
1	15RT1A03B1	MUHAMMED QUTUB SHARIQ	DESIGN AND STUDY OF SOLAR	Mr. Mansoor Hassan
	15RT5A03A1	SYED MUBEEN		
	15RT1A0384	MOHD SAMEER AHMED		
	16RT5A0314	AMOHD ABDUL SHAKEEL		
2	15RT1A0380	MOHD TAHA AHMED	DESIGN AND HEAT LOAD CALCUTAIONS FOR CIVIL COURT BUILDING	Mr. Abrar Hussain
	15RT1A03A7	MOHD AMANULLAH		
	15RT5A03C9	SYED ISHAQ MOHIUDDIN		
	15RT1A03D3	SYED MOHAMMED		
3	15RT1A03D5	SYED QUTUB UDDIN AHMED QUADRI	Design and Fabrication DI-Wheel	Mr. Syed Sibghatullah Hussaini Quadri
	15RT1A03E5	SHAHED AFRIDI MOHAMMED		
	16RT5A0310	SYED KHUNDMIR		
	16RT5A0312	ZAKRIYA ABDUL MALIK		
	16RT5A0316	MOHD ABDUL HAFEEZ		
4	16RT5A0309	SALLA ASHOK	Design of Central AC System For Commercial Shopping Mall	Mr. Mohammed Abdul Jabbar
	16RT5A0315	VEGALISETY YASHWANTH		
	16RT5A0302	ABDUL RAHMAN MOHD QADER		
5	16RT5A0311	SOHAIB ZAMA SAVANOOR	Foot Step Power Generation	Mr. Syed Sadat Ali
	15RT1A03E0	TALHA MOHSIN		
	15RT1A03C1	SYED IMRAN BIN KHALID		
6	15RT1A03C4	SYED ABDUL SALAMAN	Design and Fabrication of Multi Operation Machine	Mr. Mansoor Hassan
	15RT1A03D7	SYED SABEEL AHMED		
	15RT1A0362	MOHAMMED IBTASHAM JEELANI		
7	15RT1A0375	MOHAMMED MUDASSIR ZAMA	Impact of HVAC System on IAQ in a Mosque in Hyderabad	Mr.Raza Ahmed Khan
	15RT1A03B2	MUSADDIQ HUSSAIN		
	16RT5A0304	MD JAMEEL UDDIN		
8	16RT5A0307	MOHAMMED AKBER	Design and working of solar still	Mr.Syed Sadat Ali
	16RT5A0308	MUJEEB AHMED		
	15RT1A0392	MOHD HAMEED UDDIN JAFAR		
9	15RT1A0396	MOHD NADEEMULLAH KHAN	REDUCE SCRAP IN FORGING (ENGINE VALVE)	Dr.Shaik Maqbul Hussain
	15RT1A0397	MOHD NAZAR UDDIN		
	15RT1A0385	MOHD ABDUL ZUBAIR		

10	15RT1A03B5	SAFIULLAH KHAN	Multi Purpose of AgricultureMachine	Mr.Mohammed Umair Hamid
	15RT1A03D0	SYED JAWEED		
	15RT1A0394	MOHD IMRAN		
11	15RT1A0383	MOHAMMED ABDUL RAHEEM	DESIGN AND HEAT LOAD CALCULATIONS FOR AN OFFICE BUILDING	Mr. Abrar Hussain
	15RT1A0399	MOHD SAIF KHAN		
	15RT1A03E7	ABDUL MALIK		
	15RT1A0361	MOHAMMED HAMED ALI		
12	15RT1A0364	MOHAMMED INAMUL HASAN SAFWAN	Design and Analysis of Differential Gear Box	Mr. Mohammed Umair Ansari
	15RT1A0373	MOHAMMED MASI UDDIN		
13	15RT1A03C3	SYED ABDUL BASEER SOHAIL	Design And Analysis of SanoniusVertical Axis Wind Mill Turbine	Mr. Md. Naser Ahmed
	15RT1A03E2	MOHAMMED JAFFER		
14	15RT1A0309	MIR MUDASSIR ALI	Design of Heat exchanger used in solvent Extraction Plant of Rice Bran Oil	Dr.K.M.Mahboob Sheriff
	15RT1A0329	ALI BIN ABDUL MUJEEB		
	15RT1A0341	MOHAMMED ABDUL KAZIM		

Initiative related to industry interaction (15) Institute Marks : 15.00

2.2.4 Initiatives related to industry interaction

The Industry involvement is focused towards developing considerable interaction with students towards educating them on practical application of the knowledge they gained from the industrial perspectives. This particularly enhances the attainment of PO3, PO5, PO6, PO7, PO8, PO10, and PO12.

The following activities are planned as part of industrial training/tours.

- The relevant areas for laboratories and training students in-house are identified.
- Based on the above activity, the set of industries are identified.
- The types of laboratories are identified and objectives are stated.
- The industries to be associated with courses are identified, for partial course delivery.
- The effectiveness of laboratories usage and course delivery by the industry is monitored for improvement through impact analysis and feedback.

To enhance the interaction with industries, the table shows the list of companies with have been signed by our college.

Table 2.9 List of MOUs

S.No	Industry Name	MOUs Date
1	Plastech Engineering	10th May, 2017
2	Hyderabad Deccan Cigarette Factory	25th Oct, 2017
3	Masqati dairy product Factory	09th Nov, 2018
4	Shakti Polymer	12th Dec, 2018
5	Sanskriti Udyog	15th Mar,2019
6	Sumo Biscuits Pvt Ltd	28th Aug, 2019
7	SAMUH INDIA	25 Oct ,2020

A. Industry supported laboratories

Research and Development Laboratory has been established through **Plastech Engineering**, in order to educate students on the varieties of manufacturing process using CNC machine by designing complex part program and also to motivate the students to utilize them in their projects.

The laboratory set up and run by during academic year 2018-2019, is shown in table

CAY (2018-2019)

Table 2.2.4.2: Plastech Engineering Laboratory Details

S.No	Name of Lab	Associated Industry	Machine Tool
1	Advanced CNC Lab	Plastech Engineering	CNC Turning
2	CAD/CAM Lab	Plastech Engineering	Ansys Software

B.	Industry involvement in the program design and partial delivery of any regular course for Students.

- Some of the projects undertaken by VIII Semester project do seek guidance from Industry. In order to design various inputs on course delivery and beyond syllabus contents the Institution consults the industry. Guest lectures on important topics of regular Curriculum are delivered from time to time.
- Industry visits on a regular basis are organized once in a year and all

Studentsgot an opportunity to interact with the industry and get exposure to real

life practices.

- Many invited talks and seminars from industry resource persons are arranged and Department invites the participant from various Department and also participants from other colleges.
- The Department of Mechanical Engineering has signed Memorandum of Understanding (MoU) in order to provide the platform for interaction between the student and industry.

C.	Impact analysis of industry institute interaction and actions taken thereof.

After the training program and the class delivered by the industry experts, we conduct a questionnaire for students using the following assessment. The sample Questionnaire for students on Impact Analysis has been demonstrated below.

Table 2.2.4.9: Questionnaire for students on Impact Analysis

Question Number	Question	To a very great extent (4)	To a great extent (3)	Number To a moderate extent (2	To some extent (1)	Not at all(0)
1.	Did the industry team give the required material to help you design solutions?	4		2		
2.	Did the industry give you necessary hardware and software tools?		3			
3.	Were you able to apply the knowledge gained through curriculum and industry to complete your training?		3			
4.	Were you able to design solutions to the problems faced?			2		
5.	Were you able to achieve results as expected?	4				

The quality of industrial training is considered to be good or better if the average value is greater than 2.5 for the questionnaire.

Initiative related to industry internship/summer training (15) Institute Marks : 15.00

2.2.5	Initiatives related to industry internship / summer training	15

The Students are encouraged to take up internship program during their semester break. Faculty members give their guidelines, suggestions and scope and contact details of an internship. They also help the Students by interacting with the industry experts,

Provide the Students recommendation letters and other necessary supports. The alumni coordinator constantly interacts with alumni those who are working in the industries and request them to provide necessary guidelines and supports for their junior's internship.

A.	Industry training / tours for Students

Industry Visits:

The faculty of the Department constantly tries to interact with industries for industrial visit.

S. No	Industry Name	DATE OF VISIT
1	CITD	17/05/2017
2	BHEL	01/06/2017
3	Vejlan Hydraulics Ltd	14/02/2018
4	Nuclear Fuel Complex	20/02/2018
5	Plastech Engineering	09/08/2019
6	Masqati Dairy Product Factory	19/08/2019
7	Vejlan Hydra Ltd	05/09/2019
8	Vejlan Denison Limited	25/09/2019
9	RSP Air Product Pvt. Ltd	03/02/2020
10	Midhani, Hyderabad	16/12/2021

B.	**Industrial/internship/ summer training of more than two weeks and post training Assessment**

The Students are encouraged to take up internship program. Faculty members give their guidelines, suggestions and scope and contact details of an internship. They also help the Students by interacting with the industrial experts; provide the Students recommendation letters and other necessary supports.

A representative of the participation by student is given below. Complete detail student wise is available with the institution. The duration of the training is 1-2 months depending on the requirement of the industry.

CAYM **2020-2021**

S.NO	INDUSTRIAL NAME	DURATION	PROJECT TITLE	STUDENT NAME	ROLL .NO
1.	DRDL-DRDO	1 JAN 2021- 31 MARCH 2021	THERMO-STRUCTURAL DESIGN AND ANALYSIS TO COMTROL SURFACE TPS FOR A HYPERSONIC MISSLE	1. MOHAMMED ABDULLAH GHORI	1.17RT1A0322

CAYM1 **2019-2020**

S.NO	INDUSTRIAL NAME	DURATION	PROJECT TITLE	STUDENT NAME	ROLL .NO
1.	SOUTH CENTRAL RAILWAY .	21 JUNE 2019 - 13 JULY 2019	STUDY OF BREAKING SYSTEM COACHES AND ITS ASSOCIATED SYSTEM	2. ABDUL AZEEM 3. ABDUR RAHMAN	1.17RT5A0301 2.17RT5A0304
2.	BHEL	18-06-2019 TO 18 -07-2019	MANUFACTRING OF GAS TURBINE ROTOR	1. MOHD YOUNUS 2. MOHD ZEESHAN ADNAN	1.16RT1A0388 2.16RT1A0390
3.	THE NATIONAL SMALL INDUSTRIES CORPORATION LTD	03-06-2019 TO 17-07-2019	CNC PROGRAMMING AND OPERATION (MILLING) AND UNIGRAPHICS	. M.A. TAYYAB . AHMED ADNAN UL HUDA	1.16RT1A0307 2.16RT1A0303
4.	CENTRAL INSTITUTE OF TOOL DESIGN	26-06-2019 TO 02-07-2019	CNC PROGRAMMING (MILLING AND TURNING)	1. MOHAMMED ABDUL SHUKOOR 2. MD MUZAFAR ULLAH KHAN	1.16RT1A0322 2.16RT1A0313
5.	VIJAYA BASURI PAPER PLATE MANUFACTURER	17-06-2019 TO 08-07-2019	STUDY AND A SURVEY OR PAPER PLATE MANUFACTURING	1. MOHAMMED MUFFAKHAM MUNTAJIB UDDIN 2. MOHAMMED SALMAN MOIZ 3. MUZZAKIR HASHAM 4. SYED SHUJADDIN	1. 16RT1A0379 2. 16RT1A0385 3.16RT1A0392 4. 16RT1A03C0
6.	CENTRAL INSTITUDE OF TOOL DESIGN	19-06-2019 TO 18-07-2019	STUDY OF AUTOMATIC PNEUMATIC PAPER CUTTING MACHINE	1. MOHAMMED ASIM UDDIN	1.16RT1A0328
7	BHEL	18-06-2019 TO 18 -07-2019	STUDY OF INPLANT TRAING ON FLANGE TO FLANGE 125MW GAS TURBINE ROTOR	1. MOHD ZEESHAN ADAN 2. MOHD YOUNUS	1. 16RT1A0390 2. 16RT1A0388
8	CENTRAL INSTITUE OF TOOL DESIGN	26-06-2019 TO 02-07-2019	STUDY OF THREADING IN CNC MACHINE	1. MOHAMMED UZAIR AHMED 2. MD MAHBOOB KHAN	3. 16RT1A0348 4. 16RT1A0311
9	MEERAN ENGINEERING WORKS	10-06-2019 TO 02-07-2019	STUDY OF LATHE MACHINES AND MANUFACTURING	1. MOHAMMED IBRAHIM 2. SYED FAZLE HYDER	3. 16RT1A0370 4. 16RT1A03B1
10	WALI ENGINEERING WORKS	04-06-2019 TO 29-06-2019	STUDY ON FLYWHEEL	1. SYED NAYEEMUDDIN AHMED 2. MUSHTAQ AHMED	1. 16RT1A03B7 2. 16RT1A0391
11	WALI ENGINEERING WORKS	04-06-2019 TO 01-07-2019	MATERIAL HANDLING (OVER HEAD CRANE) IN PLASTIC PROCESSING PLANT	1. MOHD MISBAHUDDIN MUJEEB 2. MOHD JAFFER	1. 16RT1A0378 2. 16RT1A0372
12	SR TECHNOLOGIES	13-06-2019 TO 13-07-2019	STUDY ON CNC OPERATIONS	1. MD KHAJA QUTUBUDDIN NAWAZ 2. MOHAMMED AHSAN ALI 3. MOHD ABDUL KHADER	1. 16RT1A0310 2. 16RT1A0325 3. 16RT1A0359

13	TELANGANA STATE POLICE TRANSPORT ORGANISATION	24-06-2019 TO 21-07-2019	JOB TRAINING COURSE IN AUTOMOBILE REPAIRS AND MAINTENANCE AT DRIVING MAINTENANCE	1. MD ZUBAIR UDDIN 2. MOHAMMED JAWWAD SHAREEF 3. MOHD ABDUL QUDDUS SHAHEED 4. SYED GHOUSE	1. 17RT5A0308 2. 17RT5A0311 3. 17RT5A0313 4. 17RT5A0331
14	KEDIA POLYMERS	22-06-2019 TO 24-07-2019	TELESCOPIC SLIDE CHANNEL MANUFACTURING	1. ABDUL QUALEQ 2. MD SYED AALAM	1. 17RT5A0302 2. 17RT5A0307
15	NATIONAL SMALL INDUSTRIES CORPORATION LIMITED	10-06-2019 TO 24-07-2019	CNC PROGRAMMING AND OPERATION(MILLING) AND UNIGRAPHICS	1. SHAIK AAFAQ AKRAM	1. 15RT1A03B6
16	CENTRAL INSTITUTE OF TOOL DESIGN	19-06-2019 TO 18-07-2019	AUTOMATIC PNEUMATIC CUTTING MACHINE	1. M. FAZAL UDDIN JUNAIDI 2. MOHAMMED ASIMUDDIN	1. 16RT1A0364 2. 16RT1A0328
17	UPPAL INDUSTRIES PROJECTS TRAINING DIVISION	03-05-2019 TO 01-06-2019	STUDY IN MANUFACTURING OF AUTOMOTIVE AXLES	1. FARDEEN NAAZ 2. SHAFIULLAH MANSOORI	1. 16E01A0324 2. 16E01A0325
18	TELANGANA STATE POLICE TRANSPORT ORGANISATION	24-06-2019 TO 21-07-2019	SERVICING AND MAINTENANCE OF AUTOMOBILES	1. SYED NOUMAN ALI SUFIYAN 2. MOHD NADEEMUDDIN	1. 17RT5A0333 2. 17RT5A0322
19	TELANGANA STATE POLICE TRANSPORT ORGANISATION	24-06-2019 TO 21-07-2019	REPAIR AND MAINTENANCE OF AUTOMOBILES	1. ABDUL YOUSUF KHAN 2. MOHAMMED FURQAN HUSSAIN	1. 17RT5A0303 2. 17RT5A0324
20	KIRLOSKAR PNEUMATIC COMPANY LIMITED	17-06-2019 TO 16-07-2019	SUMMER INTERNSHIP IN AIR COMPRESSOR DIVISION	1. SHAIKH MOHAMMED ANAS	1. 16RT1A03B0
21	SOUTH CENTRAL RAILWAY	01-07-2019 TO 15-07-2019	CORROSION REPAIRS	1. ABDULLAH MOHD HASHIR	1. 16RT1A0302
22	TELANGANA STATE DAIRY DEVELOPMENT CO-OPERATIVE FEDERATION LIMITED	03-08-2019 TO 02-09-2019	STUDY OF BOILER	1. MOHD ABDUL ADIL 2. MOHD RAHEEM UDDIN	1. 15E01A0349 2. 15E01A0371
23	WALI ENGINEERING WORKS	04-06-2019 TO 29-06-2019	REPORT ON HOLLOW SHAFT	1. SHAIK ABDUL IMRAN 2. SHAIK MUJAHED 3. TARIQ HASSAN BAHARMUZ	1. 16RT1A0394 2. 16RT1A0396 3. 16RT1A03C4
24	ENTECH DEVELOPERS PRIVATE LIMITED	17-06-2019 TO 30-07-2019	STUDY ON FACTORY MADE BOILER	1. SAHREYAR RAHMAN 2. MOTIUL HAQUE 3. MD SHAHAB HASHMI 4. MOHD MERAJ	1. 16E01A0303 2. 16E01A0309 3. 16E01A0321 4. 16E01A0326
25	NATIONAL SMALL INDUSTRIES CORPORATION	17-06-2019 TO 28/07/2019	CNC PROGRAMMING AND MILLING OPERATIONS	1. MOHD MOINUDDIN SHAIBAAZ 2. MOHD ZUBAIR 3. MOHD ABDUL RAHMAN	1. 16E01A0334 2. 16E01A0342 3. 16E01A0354

	LIMITED				
26	ENTECH DEVELOPERS PRIVATE LIMITED	17-06-2019 TO 30-07-2019	STUDY OF FACTORY MADE WATER TUBE BOILER IN MRF	1. REHAN ANSARI	1. 16E01A0311
27	ACTON DESIGN ENGINEERS PRIVATE LIMITED	17-06-2019 TO 29-07-2019	VARIABLE REFRIGERANT VOLUME SYSTEM DESIGN	1. MD SAMAD ALI 2. MOHD ARSHAQ HUSSAIN SIDDIQUI 3. MOHAMMED SHAIBAAZ UDDIN 4. MOHAMMED MUZAFFER	1. 16E01A0366 2. 16E01A0339 3. 16E01A0347 4. 16E01A0363
28	TELANGANA STATE DAIRY DEVELOPMENT CO-OPERATIVE FEDERATION LIMITED	25-06-2019 TO 24-07-2019	STUDY OF REFRIGERATION AND BOILERS	1. MOHAMMED TAJAMMUL SIDDIQ 2. MOHD WASEEM KHAN 3. MOHAMMED ABDUL BASEER 4. MALIK MOHD SHAIK ADBUL JABBAR 5. MOHD MUSTAFA ALI	1. 16E01A0304 2. 16E01A0312 3. 16E01A0328 4. 16E01A0335 5. 16E01A0338
29	NATIONAL SMALL INDUSTRIES CORPORATION LIMITED	10-06-2019 TO 24/07/2019	CNC PROGRAMMING AND MILLING OPERATIONS	1. MD MAHBUB ALAM 2. ALIMULLAH ANSARI 3. MOHAMMED KHALFAN AHMED	1. 16E01A0320 2. 16E01A0310 3. 16E01A0367
30	KANTI BIJLI UTPADAN NIGAM LIMITED	01-07-2019 TO 27-07-2019	STUDY OF TURBINES AT KBUNL, BIHAR	1. GUFRAN KHAN 2. MOHSIN RAJA 3. MD NOMAN ALAM	1. 16E01A0305 2. 16E01A0323 3. 16E01A0308
31	S. SONY AND CO. PVT LTD	08-06-2019 TO 11-07-2019	STUDY OF HVAC CHILLER	1. KHURSHID ALAM 2. INSAF ALI	1. 16E01A0316 2. 16E01A0317

CAYM1 2018-2019

SL.NO	INTERACTION TYPE	INDUSTRY	STUDENT ROLL.NO	DATE/DURATION
1	INTERNSHIP	NAVABHARAT PACKAGING PVT.LTD	15RT1A0312 15RT1A0344	01/06/2018 TO 01/07/2018
2	INTERNSHIP	BHEL	15RT1A0323 15RT1A0331 15RT1A0338	10/06/2018 TO 25/06/2018
3	INTERNSHIP	ADVANCE TRANING INSTITUE	15RT1A0308 15RT1A0347	02/03/2018 TO 13/03/2018
4	INTERNSHIP	TALWAR HYUNDAI	15RT1A0301 15RT5A0303 15RT1A0333	14/03/2018 TO 29/03/2018
5	INTERNSHIP	TELANGANA STATE POWER GENERATION CORPORATION LIMITED	15RT1A0314	18/06/2018 TO 02/07/2018

6	INTERNSHIP	ROLON SEALS HYDERABD	15RT1A03E0	21/05/2018 TO 17/06/2018
7	INTERNSHIP	SOUTH CENTERAL RAILWAY	16RT5A0309	18/06/2018 TO 09/07/2018

C.	**Impact analysis of Industrial Training**

1. Gain Industry Work Experience
2. Have an Edge in the Job Market
3. Transition into a Job
4. Decide if this is the Right Career for You
5. Networking Opportunities
6. Apply Classroom Knowledge
7. Gain Confidence

D.	**Student Feedback in initiative**

Students submit their feedback regarding their training/summer internship on the basis of the following points:

- Experience of working in the industry.
- Independently handling the assignments.
- Hands on training on sophisticated equipment's/instruments.
- Adaptability of the working environment.

Effectiveness of this process is analyzed through feedback from the Students. This feedback analysis is considered for improving interaction, training opportunities in new technological areas in industries.

This feedback is used for the satisfactory conduct of the program. If the feedback is not satisfactory (for an average value less than 2.5), further meetings are held with the Coordinator and senior staff members of the department to improve the process of initiatives.

3 COURSE OUTCOMES AND PROGRAM OUTCOMES (120) Total Marks 120.00

Define the Program specific outcomes

3.1 Establish the correlation between the courses and the Program Outcomes (POs) and Program Specific Outcomes (PSOs) (20) Total Marks 20.00

PSO1	Implement new ideas on product design and development with the help of modern computer aided tools, while ensuring best manufacturing practices.
PSO2	Impart technical knowledge, ethical values and managerial skills to make successful career.
PSO3	Develop innovative attitude, critical thinking and problem-solving approach for any domains of mechanical engineering.

3.1.1 Course Outcomes (COs) (SAR should include course outcomes of one course from each semester ofstudy, however, should be prepared for all courses and made available as evidence, if asked) (5) Institute Marks: 5.00

Note: Number of Outcomes for a Course is expected to be around 6.

Course Name:	C3 04R	Course Year:	2020-2021
Items			
C3 04R.1	To understand the concept of engineering materials with its classification and crystal structure as well as dislocation strengthening mechanisms. To identify various imperfections various crystal structure and constitution of alloys.		
C3 04R.2	To analyze the concept of phase diagram.		
C3 04R.3	To analyze the concept of iron-carbide diagram & evaluate the concept of Heat treatment of steels & its interpreting of final microstructures with their properties.		
C3 04R.4	To understand the concept of various types of materials such as cast-iron Non-ferrous metals and alloys, Ceramics, Polymers and composites.		

Course Name:	C4 01R	Course Year:	2020-2021
Items			
C4 01R.1	Understand the gyroscopic effects in ship, aero plane and road vehicles.		
C4 01R.2	Characterize and design fly wheels.		
C4 01R.3	Analyze and design centrifugal governors and analyze balancing problems in rotary and reciprocating machinery.		
C4 01R.4	Understand free and forced vibrations of single degree freedom systems.		

Course Name:	C5 02R	Course Year:	2020-2021
Items			
C5 02R.1	Recognize the types of compressors and evaluate their performance under different operating conditions.		
C5 02R.2	Understand the working principles of various types of IC engines and its supporting systems. Evaluate the performance of IC engines under different operating conditions		
C5 02R.3	Understand and apply the principles of boilers, nozzles and condensers for implementation in industry and interpret velocity diagrams.		
C5 02R.4	Design power plants considering power plant economics and environmental impact.		

Course Name :	C6 05	Course Year :	2020-2021
Items			
C6 05.1	Introduction to the basic principles of Air refrigeration and its Analysis		
C6 05.2	Working on vapor compression refrigeration cycle for actual and theoretical and its analysis Using P-H Chart.		
C6 05.3	knowledge and Analysis for the design of refrigeration and air conditioning equipments		
C6 05.4	Performance of vapor absorption, and steam jet refrigeration systems. Psychometric properties of air and its Analysis for Equipment load.		

Course Name :	C6 01R	Course Year :	2020-2021
Items			
C6 01R.1	Understand the concept of Rankin cycle And Describe the basic principles of steam power plant and combustion process		
C6 01R.2	Apply the principles of internal combustion engine plant ,gas turbine plant and direct energy conversion		
C6 01R.3	Analyze the hydro electric power plant, hydro project plants and power from non conventional energy sources		
C6 01R 2.4	Demonstrate the nuclear power station and types of reactors and apply the power plant economics and environmental considerations.		

Course Name :	C8 02R	Course Year :	2020-2021
Items			
C8 02R.1	Students will be able Understand different types of production system and ability to apply optimized one. Able to work according to forecasting of organization production system.		
C8 02R.2	Students will be able to apply knowledge of mathematics, science and engineering to evaluate MRP, JIT systems and solve Problems related to inventory control models like ABC, VED, and EOQ.		
C8 02R.3	Students will able to apply knowledge on the basis of process requirement like Lob, routing, scheduling etc.		
C8 02R.4	Students will be to ability to understand regarding dispatching procedures, and Follow up and ability to engage in self education and life-long learning		

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3.1.2 CO-PO matrices of courses selected in 3.1.1 (Six matrices to be mentioned; one per semester from 3rd to 8th semester) (5)

1 . course name: C304R

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C304R.1	3	3	3	1	2	3	2	1	2	2	2	2
C304R.2	2	2	3	1	2	2	2	-	2	1	1	1
C304R.3	3	2	2	1	1	1	0	0	1	1	1	0
C304R.4	3	2	2	2	1	1	0	1	0	1	0	1
Average	**2.75**	**2.25**	**2.50**	**1.25**	**1.67**	**1.75**	**2.00**	**1.00**	**1.67**	**1.25**	**1.33**	**1.33**

2 . course name: C401R

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C401R.1	3	3	3	3	3	2	1	-	3	1	-	3
C401R.2	3	3	3	3	3	3	1	-	3	1	-	3
C401R.3	3	3	3	2	2	2	1	-	3	1	-	3
C401R.4	3	3	3	3	3	3	2	-	3	1	-	3
Average	**3.00**	**3.00**	**3.00**	**2.75**	**2.75**	**2.50**	**1.25**	**0.00**	**3.00**	**1.00**	**0.00**	**3.00**

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3 . course name: C502R

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C502R.1	3	3	2	3	2	1	1	0	1	1	2	2
C502R.2	3	3	3	3	2	2	2	0	1	2	2	2
C502R.3	3	3	3	3	3	3	3	1	2	3	2	1
C502R.4	3	2	3	3	3	3	3	1	3	3	3	3
Average	**3**	**2.75**	**2.75**	**3**	**2.50**	**2.25**	**2.25**	**0.5**	**1.75**	**2.25**	**2.25**	**2**

4 . course name: C605

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C605.1	3	3	2	2	2	0	2	1	0	0	1	2
C605.2	3	3	3	3	2	0	1	1	0	1	2	2

C605.3	3	2	1	2	1	0	2	1	2	2	1	0
C605.4	2	2	2	2	2	0	2	2	0	2	1	3
Average	**2.75**	**2.5**	**2**	**2.25**	**1.75**	**0**	**1.75**	**1.25**	**2**	**1.66**	**1.25**	**2.33**

5 . course name: C601R

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C601R.1	3	3	3	3	3	3	3	3	3	3	3	3
C601R.2	3	3	1	1	1	3	3	3	3	3	3	3
C601R.3	1	1	1	3	1	1	1	3	3	3	1	1
C601R.4	3	3	3	3	3	3	3	3	2	2	2	2
Average	**3.00**	**2.50**	**2.00**	**2.50**	**2.00**	**2.50**	**2.50**	**3.00**	**2.75**	**2.75**	**2.25**	**2.25**

6 . course name: C802R

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C802R.1	2	2	1	1	1	1	-	1	2	1	2	2
C802R.2	2	2	3	1	2	-	-	-	3	2	2	2
C802R.3	3	3	2	2	2	-	1	1	2	2	3	2
C802R.4	2	2	2	2	1	1	1	-	2	2	3	2
Average	**2.50**	**2.25**	**2.00**	**1.50**	**1.50**	**1.00**	**1.00**	**1.00**	**2.25**	**1.75**	**2.50**	**2.00**

1 . Course Name : C304R

Course	PSO1	PSO2	PSO3
C304R.1	1	2	1
C304R.2	-	-	2

C304R.3	1	-	2
C304R.4	-	-	-
Average	**1.00**	**0.00**	**2.00**

2 . Course Name : C401R

Course	PSO1	PSO2	PSO3
C401R.1	3	3	3
C401R.2	3	3	3
C401R.3	3	3	3
C401R.4	3	3	3
Average	**3.00**	**3.00**	**3.00**

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3 . Course Name : C502R

Course	PSO1	PSO 2	PSO3
C502R.1	2	2	2
C502R.2	2	2	2
C502R.3	2	3	3
C502R.4	3	3	3
Average	**2.25**	**2.5**	**2.5**

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4 . Course Name : C605

Course	PSO1	PSO2	PSO3
C605.1	3	2	1
C605.2	3	2	2
C605.3	3	2	2
C605.4	3	2	1
Average	**3.00**	**2.00**	**1.50**

5 . Course Name : C601R

Course	PSO1	PSO2	PSO3
C601R.1	3	3	2
C601R.2	3	3	2
C601R.3	2	2	1
C601R.4	1	1	2
Average	**1.50**	**1.75**	**2.25**

6 . Course Name : C802R

Course	PSO1	PSO2	PSO3
C802R.1	3	3	2
C802R.2	3	3	2
C802R.3	2	2	1
C802R.4	3	2	2
Average	**2.75**	**2.50**	**1.75**

3.1.3 - A Program level Course-PO matrix of all courses INCLUDING first year courses (10) Institute Marks: 10.00

SL NO	Course	SUBJECT	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
1	C101R	MATHEMATICS-I	3.00	2.00	1.00	1.50	1.33	1.75	0.00	0.00	1.00	0.00	0.00	1.50
2	C102R	PHYSICS	2.00	1.00	0.00	1.50	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.50
3	C107	BASIC ELECTRICAL	1.75	1.75	1.25	1.75	1.75	1.50	1.50	1.00	1.75	1.00	1.33	2.50
4	C111R	PHYSICS LAB	1.33	1.50	1.50	1.00	1.50	1.00	2.00	1.50	2.00	1.00	1.00	1.00
5	C114	BASIC ELECTRICAL LAB	1.41	1.41	1.07	1.41	1.41	1.24	1.24	0.90	1.41	0.90	1.13	1.91
6	C115	ENGG GRAPHICS	2.00	1.75	2.00	1.25	2.00	1.50	1.00	0.00	1.00	1.50	1.75	1.75
7	C103R	PROGRAMMING FOR P S	2.50	2.00	1.00	1.30	1.00	1.00	1.00	1.00	1.50	1.50	1.00	1.50
8	C201R	MATHEMATICS-II	3.00	2.50	2.25	1.00	1.75	0.00	1.00	0.00	0.00	1.67	1.50	1.75
9	C202R	CHEMISTRY	1.50	1.50	2.33	1.00	2.00	2.50	2.25	1.00	0.00	0.00	1.00	1.33
10	C204R	ENGLISH	1.67	1.00	1.33	1.33	1.00	1.50	1.25	1.67	1.25	2.25	1.50	1.75
11	C112R	PROGRAMMING FOR PS LAB	3.00	3.00	0.00	3.00	0.00	3.00	3.00	2.00	3.00	3.00	2.00	2.00
12	C211	ENGLISH LAB	0.50	0.75	0.50	0.50	1.25	1.25	0.75	1.25	1.50	2.75	0.75	2.00
13	C212R	CHEMISTRY LAB	1.00	1.33	3.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
14	C214R	WORKSHOP LAB	2.75	2.00	1.75	1.75	2.75	2.25	1.50	1.00	2.00	1.50	2.00	2.00
15	C308	ETC IN ENGLISH	1.67	1.00	1.33	1.33	1.00	1.50	1.25	1.67	1.25	2.25	1.50	1.75
17	C306R	MATHEMATICS-3	2.50	2.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	3.00
18	C203R	ENGG MECHANICS	2.50	2.25	2.50	2.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.25
19	C307	BASIC ELECTRONICS	1.75	1.75	1.25	1.75	1.75	1.50	1.50	0.00	1.75	1.00	1.33	2.50
20	C304R	MMS	3.00	3.00	2.25	2.25	1.25	1.00	1.00	1.00	1.67	1.00	1.00	2.00
21	C302R	THERMODYNAMICS	3.00	2.50	2.50	2.67	1.50	1.67	1.00	2.00	1.00	2.00	1.50	2.50
22	C317	MMT LAB	2.75	2.25	1.50	2.00	2.25	1.50	1.25	0.00	1.00	1.50	1.50	2.00
23	C318	MACHINE DRAWING	3.00	2.00	1.50	1.25	0.00	1.75	2.00	2.00	0.00	1.00	0.00	2.25
24	C406	INDUS PSYCHOLOGY	2.00	2.00	2.00	1.75	1.00	1.25	1.75	1.67	1.00	1.00	1.00	1.50
26	C803R	ENERGY SCIENCES	3.00	3.00	3.00	2.50	2.00	3.00	3.00	2.00	1.25	1.50	2.75	3.00
27	C305R	MOM	2.00	2.67	2.50	2.33	2.50	2.25	2.00	3.25	1.50	2.00	2.00	2.25
28	C502R	APP THER DYN	3.00	2.75	2.75	3.00	2.50	2.25	2.25	1.00	1.75	2.25	2.25	2.00
29	C303R	KOM	2.75	2.50	1.50	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	2.00
30	C404R	MANUFAC PROCESSES	2.75	2.25	2.50	1.25	1.67	1.75	2.00	1.00	1.67	1.25	1.33	1.33

31	C511R	THERMAL LAB-1	3.00	1.75	2.00	1.75	2.00	2.00	0.00	0.00	1.75	2.00	2.00	1.50
32	C413R	MP LAB-1	3.00	1.75	2.00	1.75	2.00	2.00	0.00	0.00	1.75	2.00	2.00	1.50
33	C401R	DOM	3.00	2.50	3.00	3.00	2.00	1.00	2.00	3.00	3.00	1.50	3.00	3.00
34	C501R	DMM-1	3.00	2.00	3.00	3.00	2.00	3.00	2.00	0.00	1.00	0.00	1.00	3.00
35	C503R	MMT	2.00	1.50	0.75	0.75	0.50	0.25	0.25	0.00	0.50	0.00	0.00	0.25
36	C405R	BEFA	1.80	1.30	1.70	1.00	1.00	1.30	1.00	0.00	3.00	2.80	2.30	2.30
37	C601R	THERMAL ENGG-2	2.75	2.00	1.67	2.50	2.67	2.00	2.00	1.00	1.75	2.25	2.50	2.00
39	C511R	THERMAL LAB	3.00	1.75	2.00	1.75	2.00	2.00	0.00	0.00	1.75	2.00	2.00	1.50
40	C516	MMT LAB	3.00	2.25	1.25	1.50	0.00	1.00	0.00	1.00	1.25	0.00	1.00	1.50
41	C515R	K & D LAB	3.00	2.25	2.00	3.00	0.00	2.00	0.00	1.00	2.00	0.00	2.00	2.00
42	C604R	IPR	1.50	0.00	0.00	0.00	0.00	2.00	0.00	3.00	0.00	1.50	1.75	1.00
43	C602R	DMM-II	3.00	2.00	3.00	3.00	2.00	3.00	2.00	0.00	2.00	0.00	1.00	3.00
44	C603R	HEAT TRANSFER	3.00	3.00	2.50	3.00	3.00	3.00	1.00	0.00	1.00	1.75	1.00	1.50
45	C701R	CAD & CAM	3.00	2.00	1.50	1.25	0.00	1.75	2.00	2.00	0.00	1.00	0.00	2.25
46	C802R	PPC	2.75	1.33	2.25	2.25	2.25	1.33	1.50	1.00	1.75	1.75	2.00	2.25
47	C505R	DPPM	2.00	2.67	2.67	2.00	0.00	1.75	2.67	2.25	0.00	2.00	0.00	2.25
48	C607	FEM	2.50	2.25	2.50	2.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
49	C611R	HEAT TRANSFER LAB	2.50	2.75	3.00	2.50	2.75	2.50	2.50	2.00	2.50	2.75	1.50	2.50
50	C711R	CADD & CAM LAB	1.33	1.00	1.50	1.75	1.33	2.00	1.67	1.75	3.00	2.00	1.33	2.00
51	C613R	ADV ENGLISH LAB	3.00	1.00	1.00	0.00	0.00	3.00	1.50	1.00	1.50	1.30	1.00	3.00
53	C701R	CAD/CAM	3.00	2.00	1.50	1.25	0.00	1.75	2.00	2.00	0.00	1.00	0.00	2.25
54	C702R	ICS	3.00	2.00	3.00	2.00	2.25	2.50	2.25	1.00	1.75	2.00	2.50	2.75
55	C703R	POWER PLANT ENGG	3.00	2.00	3.00	2.00	2.25	2.50	2.25	1.00	1.75	2.00	2.50	2.75
56	C707	CNC TECHNOLOGY	3.00	2.50	2.00	2.50	2.33	0.00	0.00	0.00	0.00	1.50	0.00	1.00
57	C708	AMT	3.00	2.00	1.50	1.25	0.00	1.75	2.00	2.00	0.00	1.00	0.00	2.25
58	C711R	CAD/CAM LAB	1.33	1.00	1.50	1.75	1.33	2.00	1.67	1.75	3.00	2.00	1.33	2.00
59	C712R	ICS LAB	3.00	2.50	2.50	2.25	1.75	2.00	0.00	0.00	0.00	1.00	1.00	1.50
60	C822R	MINI PROJECT	1.50	1.75	1.75	1.75	1.50	1.00	1.00	0.00	2.50	3.00	1.50	1.00
61	C823R	SEMINAR	2.33	2.25	2.00	1.50	3.00	1.00	1.00	1.00	3.00	3.00	3.00	2.00
62	C705R	UCMP	2.25	1.25	1.25	1.25	1.50	0.00	1.33	0.00	0.00	0.00	0.00	2.00
63	C802R	PPC	3.00	2.00	3.00	2.00	2.25	2.50	2.25	1.00	1.75	2.00	2.50	2.75
64	C804	ENVIRONMENTAL IMPACT A	0.00	0.00	0.00	0.80	0.00	1.50	2.00	2.80	1.50	2.50	0.00	1.60

65	C821R	MAJOR PROJECT	3.00	3.00	0.00	3.00	0.00	3.00	3.00	2.00	3.00	3.00	2.00	2.00

3.1.3 - B Program level Course-PSO matrix of all courses INCLUDING first year courses

Course	SUBJECT	PSO1	PSO2	PSO3
C101R	MATHEMATICS-I	1.75	1.00	0.00
C102R	PHYSICS	1.00	1.00	1.00
C107	BASIC ELECTRICAL	1.00	1.00	1.00
C111R	PHYSICS LAB	1.33	1.50	1.00
C114	BASIC ELECTRICAL LAB	0.90	0.90	0.90
C115	ENGG GRAPHICS	1.50	1.50	1.75
C103R	PROGRAMMING FOR P S	2.30	2.00	0.00
C201R	MATHEMATICS-II	1.00	2.00	1.50
C202R	CHEMISTRY	1.50	1.00	1.25
C204R	ENGLISH	1.00	1.50	0.00
C112R	PROGRAMMING FOR PS LAB	3.00	1.50	0.00
C211	ENGLISH LAB	1.25	0.75	1.50
C212R	CHEMISTRY LAB	0.00	0.00	0.00
C214R	WORKSHOP LAB	2.50	1.75	1.75
C308	ETC IN ENGLISH	1.00	1.50	0.00
C306R	MATHEMATICS-3	1.00	2.00	2.00
C203R	ENGG MECHANICS	2.00	2.00	0.00
C307	BASIC ELECTRONICS	1.00	1.00	1.00
C304R	MMS	2.00	1.75	2.25
C302R	THERMODYNAMICS	2.00	1.75	2.00
C317	MMT LAB	2.00	2.00	1.75
C318	MACHINE DRAWING	1.00	2.00	3.00
C406	INDUS PSYCHOLOGY	1.50	1.50	1.50
C803R	ENERGY SCIENCES	2.50	2.75	2.50
C305R	MOM	2.00	1.75	1.50
C502R	APP THER DYN	2.25	2.50	2.50
C303R	KOM	2.50	1.00	2.75
C404R	MANUFAC PROCESSES	1.25	1.25	1.25

C511R	THERMAL LAB-1	2.75	2.75	2.63
C413R	MP LAB-1	0.00	1.67	1.00
C401R	DOM	2.00	3.00	2.00
C501R	DMM-1	2.00	1.00	3.00
C503R	MMT	2.25	1.00	1.00
C405R	BEFA	2.30	1.25	1.00
C601R	THERMAL ENGG-2	2.00	1.50	2.50
C511R	THERMAL LAB	2.75	2.75	2.625
C516	MMT LAB	1	1	1.667
C515R	K & D LAB	2.25	2.00	1.67
C604R	IPR	1.00	2.00	2.00
C602R	DMM-II	2.00	1.00	3.00
C603R	HEAT TRANSFER	1.50	1.25	1.33
C701R	CAD & CAM	1.00	2.00	3.00
C802R	PPC	2.50	2.50	2.50
C505R	DPPM	1.75	1.75	2.00
C607	FEM	1.33	1.00	0.00
C611R	HEAT TRANSFER LAB	2.75	2.75	2.63
C711R	CADD & CAM LAB	2.00	1.50	1.25
C613R	ADV ENGLISH LAB	2.50	1.75	1.50
C701R	CAD/CAM	1.00	2.00	3.00
C702R	ICS	2.5	1.75	2
C703R	POWER PLANT ENGG	2.50	1.75	2.00
C707	CNC TECHNOLOGY	1.75	2.00	1.50
C708	AMT	1.00	2.00	3.00
C711R	CAD/CAM LAB	2.00	1.50	1.25
C712R	ICS LAB	2.75	1.75	1.50
C822R	MINI PROJECT	2.00	1.33	1.00
C823R	SEMINAR	3.00	2.75	2.25
C705R	UCMP	1.00	1.50	1.50
C802R	PPC	2.50	1.75	2.00

C804	ENVIRONMENTAL IMPACT A	0.00	0.00	0.00
C821R	MAJOR PROJECT	3.00	1.00	0.00

3.2 Attainment of Course Outcomes (50) Total Marks 50.00

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10) Institute Marks : 10.00

A. List of Course Outcome assessment process

Course Outcomes are assessed on the basis of students

- Internal marks
- Assignments
- Practical exams
- External Exams.
- Major Projects.
- Seminars

B. The quality / relevance of assessment processes & tools used

The process of quality assessment tools has been described below.

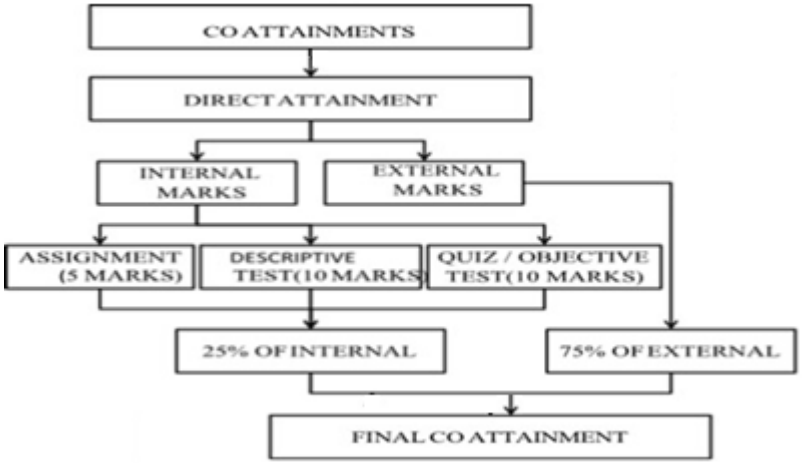


Fig 3.1.1 Flowchart of Final CO attainment

A) Internal Marks:

The assignment, descriptive test and Quiz are a qualitative performance assessment tool designed to assess student's performance.

For theory subjects, during a semester, there shall be two mid examinations. Each mid examination consists of one objective paper, one descriptive paper and two assignments. The objective paper and the descriptive paper shall be for 10 marks each. Five marks are allocated for assignments.

B) Internal Lab Assessment:

For practical subjects there shall be a continuous internal evaluation (CIE) during the semester for 25 marks. Out of the 25 marks for internal evaluation, day-to-day work in the laboratory shall be evaluated for 10 marks, Record book will be evaluated for 5 marks, and internal practical examination and viva shall be evaluated for 10 marks by the concerned laboratory faculty.

Day to Day Performance:	10 marks
Record Book:	5 marks
Internal Exam and Viva:	10 marks

Care has been taken while setting Question Papers to be in line with Course Outcomes and Blooms Taxonomy Levels, which has made the staff and students to better understand the concept of Course Outcomes and the importance of Blooms Taxonomy.

The Scrutiny team consists of following faculties:

S.No	Faculty Name	Designation
1	Dr. Syed Mujahed Hussaini	Professor & HOD
2	Dr. Zahir Hasan	Professor

C) Seminar Evaluation:

1. Seminars are conducted by Head of the Department, Seminar In charge and Class Coordinator.

2. The Committee members are:

Faculty Name	Designation
Dr. Syed Mujahed Hussaini	Professor & HOD
Dr. Noor Alam	Associate Professor
Mohammed Nasir Ahmed	Assistant Professor

3. Seminar topic will be finalized by considering the technology which is competitive and in demand.

- The evaluation process for Internal Assessment is given by committee members and guide and reviewer according to Rubrics model.

Segment	Marks	Area
Presentation	10	Classification of concepts
	10	Data in Presentation
	10	Understanding and explanation
	10	Answering
Technical Seminar Report	10	Presentation Skills and Report

D) Project Evaluation:

1. Out of a total of 200 marks for the UG Major Project, 50 marks shall be allotted for internal evaluation and 150 marks for the end semester examination (viva voce). The average performance is taken as benchmark. The Project Evaluation team consists of the members:

Faculty Name	Designation
Dr. Syed Mujahed Hussaini	Professor & HOD
Raza Ahmed Khan	Associate Professor
Mohammed Aqeel Ahmed	Assistant Professor

Students will submit the Abstract to the coordinator and the project will be finalized by the Head of the Department by conducting the Title Finalization Review by the end of 7th semester.

Three Project Reviews will be conducted by evaluating their skills and correcting them in every area of presentation during the 8th semester by Project Evaluation team and allotted Internal Guides.

Marks will be given and submitted to the Head of the Department by the end of the review conducted by the External Examiner according to the schedule of panel.

Review will be conducted by the External Examiner according to the schedule of panel allotted by the University and then marks will be submitted to the Head of the Department and also uploaded in the university portal.

E) External Marks:

Semester End examination are the metric for assessing whether all the COs are attained or not. Examination is more focused on attainment of Course Outcomes and Program Outcomes using a descriptive exam conducted by the university.

The end semester examinations will be conducted for 75 marks for both theory and practical subjects. External question paper is set and provided online by the affiliating university and valuation also is done in the spot valuation centre at the university. Hence the average performance is taken as benchmark.

CO attainment can be calculated by using direct method.

1. **Direct method:** basically displays the student's knowledge and skills from their performance and examined from the performance of the students in all the relevant assessment categories, which include internal assessments, assignments, quiz and final university examination. These implementations provide a sampling of student's potential and provide strong proof of student learning. In this method 25% of Mid exam marks and 75% of External semester end marks are considered.
2. Indirect method:

After completion of the course student feedback is collected on course outcomes i.e.

Course End Survey. Final PO attainment can be calculated 80% of direct method + 20%

of indirect method.

3.2.2 Record the attainment of Course Outcome of all courses with respect to set attainment levels (40)

Institute

Marks : 40.00

Measuring Course Outcomes attained through University Examinations

Target has been stated in terms of percentage of students getting more than the university average marks or more as selected by the Program in the final examination. Some cases, where the university does not provide useful indicators like average or median marks etc., the program may choose an attainment level on its own with justification.

Example related to attainment levels vs. targets: (The examples indicated are for reference only. Program may appropriately define levels)

Attainment Level 1: 35% students scoring more than 35% marks (target) out of the relevant maximum marks of set attainment level in the final university examination.

Attainment Level 2: 45% students scoring more than 35% marks (target) out of the relevant maximum marks of set attainment level in the final university examination.

Attainment Level 3: 55% students scoring more than 35% marks (target) out of the relevant maximum marks of set attainment level in the final university examination.

Attainment is measured in terms of actual percentage of students getting set percentage of marks.

- If targets are achieved, then all the course outcomes are attained for that year. Program is expected to set higher targets for the following years as a part of continuous improvement.
- If targets are not achieved the program should put in place an action plan to attain the target in subsequent years.

Measuring CO attainment through Internal Assessments: (The examples indicated are for reference only. Program may appropriately define levels)

Target may be stated in terms of percentage of students getting more than class average marks in each of the associated COs in the assessment parameters (mid exams, quiz, assignments, mini projects, major project and comprehensive viva etc. as mapped with the POs)

Example

Mid Exam 1 addresses CO1 and CO2 distributed between assignment, quiz and descriptive out of maximum 25 marks.

Examples related to attainment levels Vs. targets:

Attainment Level 1: 50% students scoring more than 60% marks (target) out of the relevant maximum marks.

Attainment Level 2: 60% students scoring more than 60% marks (target) out of the relevant maximum marks.

Attainment Level 3: 70% students scoring more than 60% marks (target) out of the relevant maximum marks.

Similar targets and achievement are to be stated for mini project, seminar, major project, comprehensive viva, lab internal and lab external.

Course Outcome Attainment:

For example:

Attainment through University Examination: Substantial i.e. 3 Attainment through Internal Assessment: Moderate i.e. 2

Assuming 75% weightage to University examination and 25% weightage to Internal assessment, the attainment calculations will be (75% of University level) + (25% of Internal level) i.e. 75% of 3 + 25%

of 2 = 2.25 + 0.5 = 2.75

Measurement of Course attainment levels for Internal & External Examinations: DIRECT METHOD

	ACADEMIC YEAR	**TARGET**	
CAY:	2021-2022	Competence 35% Threshold Target	
CAYm1:	2020-2021	Competence 35% Threshold Target	
CAYm2:	2019-2020	Competence 35% Threshold Target	
CAYm3:	2018-2019	Competence 35% Threshold Target	
FOR INTERNAL EXAMS			
ATTAINMENT LEVEL	**MID EXAM (DESCRIPTIVE + QUIZ + ASSIGNMENT)**		
0	< 50% students got target.		
1	50 % to 59% students got more than target.		
2	60 % to 69% students got more than target.		
3	≥ 70% students got more than target.		
FOR EXTERNAL EXAMS			
ATTAINMENT LEVEL	**CAYm1**	**CAYm2**	**CAYm3**
0	< 35% students got target	< 35% students got target	< 35% students got target

1	35 % to 44% students got more than target	35 % to 44% students got more than target	35 % to 44% students got more than target
2	45 % to 54% students got more than target	45 % to 54% students got more than target	45 % to 54% students got more than target
3	≥ 55 % students got more than target	≥ 55 % students got more than target	≥ 55 % students got more than target

FOR EXTERNAL LABS

ATTAINMENT LEVEL	CAYm1	CAYm2	CAYm3
0	< 50% students got target	< 50% students got target	< 50% students got target
1	50 % to 59% students got more than target	50 % to 59% students got more than target	50 % to 59% students got more than target
2	60 % to 69% students got more than target	60 % to 69% students got more than target	60 % to 69% students got more than target
3	≥ 70% students got more than target	≥ 70% students got more than target	≥ 70% students got more than target

A. **CO attainment calculation of a course(sample)**

CO ATTAINMENTS 2020-2021

NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, JNTUH Hyderabad

DEPARTMENT OF MECHANICAL ENGINEERING

B.Tech. II YEAR, I SEM - ATTAINMENT CALCULATIONS - Academic Year: 2020-21

Subject: MMS - Metallurgy & Material Science | Subject Code: C304R | Faculty: SYED AMER UR RAHMAN

S.No.	Hall Ticket No.	MID-1											MID-2											MID		
		ASG-1 (2.5M)	ASG-2 (2.5 M)	Quiz-1 (10 M)		Q 1 (5 M)	Q 2 (5 M)	BEST OF Q1&Q2C01	Q 3 (5 M)	Q 4 (5 M)	BEST OF Q3&Q4C02	Mid-1TOTAL (25 M)	ASG-3 (2.5M)	ASG-4 (2.5 M)	Quiz-2 (10 M)		Q 1 (5 M)	Q 2 (5 M)	BEST OF Q1&Q2C03	Q 3 (5 M)	Q 4 (5 M)	BEST OF Q3&Q4C04	Mid-2TOTAL (25 M)	Average MID	TOTAL Marks	S
		C01	C02	C01	C02	CO1	CO1		CO2	CO2			C03	C04	C03	C04	CO3	CO3		CO4	CO4			(25 M)	(100 M)	(7
1	18J31A0302	5	2.5	2.5	9		5	5		5	5	29	2.5	2.5	10	5	5	5	5	4		4	29	29	68	
2	17RT1A0322	5	2.5	2.5	10	5	5	5			0	25	2	2	10	5	5	5	5	5		5	29	27	76	
3	17RT1A03C4	5	2.5	2.5	5	5		5			0	20	1.5	1.5	8	4	4	4	4			0	19	20	59	
4	17RT1A0337	5	2.5	2.5	5	5		5			0	20	2	2	7	3.5	3.5		3.5	5		5	23	22	61	
5	18D91A0316	5	2.5	2.5	10		5	5	5		5	30	2.5	2.5	8	4	4	4	4		4	4	25	28	77	
6	18D91A0318	5	2.5	2.5	10		4	4	5		5	29	2.5	2.5	8	4	4		4	4	4	4	25	27	96	
7	18RT1A0301	5	2.5	2.5	10	3	2	3			0	23	2.5	2.5	5	2.5	2.5		2.5	2	3	3	18	21	70	
8	18RT1A0302	5	2.5	2.5	10		3	3		1	1	24	2	2	8	4	4		4	4	4	4	24	24	63	
9	18RT1A0304	5	2.5	2.5	10	3		3		1	1	24	2	2	7	3.5	3.5		3.5	3	4	4	22	23	62	
10	18RT1A0306	5	2.5	2.5	10	4	3	4			0	24	2.5	2.5	3	1.5	1.5		1.5	4	5	5	16	20	59	
11	18RT1A0311	5	2.5	2.5	10		1	1			0	21	2	2	8	4	4	5	5		5	5	26	24	83	
12	18RT1A0312	5	2.5	2.5	9	1	4	4			0	23	2.5	2.5	4	2	2		2	5		5	18	21	60	
13	18RT1A0313	5	2.5	2.5	2		4	4	4		4	20	2	2	4	2	2	4	4	4		4	18	19	58	
14	18RT1A0317	5	2.5	2.5	5	3	1	3			0	18	2	2	2	1	1		1	4	4	4	12	15	54	
15	18RT1A0319	5	2.5	2.5	9		4	4	4		4	27	2	2	6	3	3	4	4			0	17	22	71	
16	18RT1A0321	5	2.5	2.5	5	3	4	4			0	19	2.5	2.5	5	2.5	2.5		2.5	4	3	4	19	19	58	
17	18RT1A0325	5	2.5	2.5	4	5		5		3	3	22	2	2	3	1.5	1.5		1.5	4	3	4	14	18	57	
18	18RT1A0327	5	2.5	2.5	5	5		5			0	20	2	2	3	1.5	1.5		1.5	5	5	5	15	18	67	
19	18RT1A0331	5	2.5	2.5	2	4	1	4			0	16	2.5	2.5	4	2	2		2	3	4	4	17	17	56	
20	18RT1A0333	5	2.5	2.5	2	2	4	4			0	16	2.5	2.5	4	2	2		2	3	4	4	17	17	56	
21	18RT1A0334	5	2.5	2.5	9	5	5	5			0	24	2.5	2.5	8	4	4		4	5	4	5	26	25	64	
22	18RT1A0335	5	2.5	2.5	1	1	3	3			0	14	2.5	2.5	9	4.5	4.5		4.5	4	2	4	27	21	60	
23	18RT1A0336	5	2.5	2.5	10	3	3	3			0	23	2.5	2.5	3	1.5	1.5		1.5	4	5	5	16	20	59	
24	18RT1A0338	5	2.5	2.5	6	3		3			0	19	2.5	2.5	2	1	1		1	4	5	5	14	17	56	
25	18RT1A0339	5	2.5	2.5	10		5	5	4		4	29	2	2	9	4.5	4.5		4.5	4	5	5	27	28	87	
26	18RT1A0341	5	2.5	2.5	9	2	4	4			0	23	2.5	2.5	8	4	4	5	5			0	22	23	62	

27	18RT1A0345	5	2.5	2.5	10		3	3	3		3	26	2	2	10	5	5	4	5	4		4	28	27	66
28	18RT1A0346	5	2.5	2.5	8	4	2	4			0	22	2	2	2	1	1		1	4		4	12	17	56
29	18RT1A0349	5	2.5	2.5	10	4	4	4			0	24	2.5	2.5	10	5	5	5	5			0	25	25	84
30	18RT1A0350	5	2.5	2.5	5	2		2			0	17	2.5	2.5	2	1	1		1	4	3	4	13	15	54
31	18RT1A0354	5	2.5	2.5	8	4	2	4			0	22	2	2	6	3	3		3	3		3	19	21	60
32	18RT1A0357	5	2.5	2.5	10	4		4		5	5	29	2	2	9	4.5	4.5		4.5	5	5	5	27	28	97
33	18RT1A0360	5	2.5	2.5	9	3	3	3			0	22	2	2	5	2.5	2.5	5	5		4	4	20.5	21	70
34	18RT1A0361	5	2.5	2.5	10		4.5	4.5	4.5		4.5	29	2.5	2.5	8	4	4	5	5	4		4	26	28	67
35	18RT1A0362	5	2.5	2.5	9	1	1	1			0	20	2.5	2.5	8	4	4	5	5			0	22	21	60
36	18RT1A0363	5	2.5	2.5	10	4	4	4			0	24	2.5	2.5	5	2.5	2.5		2.5	5		5	20	22	81
37	18RT1A0364	5	2.5	2.5	10	4	4	4			0	24	2.5	2.5	5	2.5	2.5	4	4	4		4	20.5	22	71
38	18RT1A0365	5	2.5	2.5	9		4.5	4.5	4.5		4.5	28	2	2	8	4	4		4	5		5	25	27	66
39	18RT1A0366	5	2.5	2.5	10	4	4	4			0	24	2.5	2.5	8	4	4	5	5	5		5	27	26	65
40	18RT1A0398	5	2.5	2.5	10	4.5	4	4.5			0	24.5	2.5	2.5	10	5	5	5	5		5	5	30	27	96
41	19RT5A0301	5	2.5	2.5	8		2	2		1	1	21	2.5	2.5	3	1.5	1.5	4	4	5		5	18.5	20	59
42	19RT5A0303	5	2.5	2.5	5	2		2			0	17	2.5	2.5	6	3	3	5	5		5	5	24	21	60
43	19RT5A0304	5	2.5	2.5	6		3	3		3	3	22	2.5	2.5	5	2.5	2.5		2.5	5	5	5	20	21	60
44	19RT5A0305	5	2.5	2.5	10		4	4	4		4	28	1.5	1.5	8	4	4	4	4	4		4	23	26	65
45	19RT5A0307	5	2.5	2.5	9		5	5			0	24	2.5	2.5	6	3	3	4	4	3		3	21	23	62
46	19RT5A0308	5	2.5	2.5	9		1	1		3	3	23	2.5	2.5	2	1	1	5	5		5	5	18	21	60
47	19RT5A0311	5	2.5	2.5	8		3	3		2	2	23	2.5	2.5	4	2	2	4	4	5		5	20	22	61
48	19RT5A0312	5	2.5	2.5	10		3	3		3	3	26	2.5	2.5	5	2.5	2.5		2.5	4	5	5	20	23	62
49	19RT5A0313	5	2.5	2.5	9		4.5	4.5	4.5		4.5	28	2.5	2.5	10	5	5	5	5	4		4	29	29	88
50	19RT5A0314	5	2.5	2.5	10		3	3			0	23	2.5	2.5	7	3.5	3.5		3.5	4		4	23	23	82
51	19RT5A0315	5	2.5	2.5	10			0		4	4	24	2.5	2.5	8	4	4	5	5	5		5	27	26	75
52	19RT5A0316	5	2.5	2.5	10			0		5	5	25	2.5	2.5	8	4	4	5	5	5		5	27	26	85
53	19RT5A0317	5	2.5	2.5	9			0			0	19	2.5	2.5	8	4	4	5	5			0	22	21	60
54	19RT5A0318	5	2.5	2.5	9			0		5	5	24	2.5	2.5	8	4	4	5	5	4		4	26	25	84
55	19RT5A0319	5	2.5	2.5	10	3	4	4			0	24	2.5	2.5	8	4	4	5	5		5	5	27	26	95
56	19RT5A0320	5	2.5	2.5	9	2	0.5	2			0	21	2.5	2.5	7	3.5	3.5	4	4		4	4	23.5	22	61
57	19RT5A0321	5	2.5	2.5	8	3	2	3			0	21	2.5	2.5	4	2	2		2	5	4	5	18	20	59
58	19RT5A0322	5	2.5	2.5	9		0.5	0.5		4.5	4.5	24	2.5	2.5	6	3	3		3	5	5	5	22	23	72
59	19RT5A0323	5	2.5	2.5	9	3		3			0	22	2.5	2.5	4	2	2	4	4		5	5	20	21	60
60	19RT5A0324	5	2.5	2.5	10		4	4		4	4	28	2.5	2.5	8	4	4		4	5	5	5	26	27	86
Average Marks		**5.00**	**2.50**	**2.50**	**8.20**	**3.34**	**3.25**	**3.58**	**4.25**	**3.30**	**3.68**	**23.08**	**2.33**	**2.33**	**6.28**	**3.14**	**3.14**	**4.60**	**3.66**	**4.22**	**4.31**	**4.46**	**21.75**	**22.41**	**67.91**

CIE (Mid Exam) CO Wise Percentage		
COURSE OUTCOME	CO Wise Sum	CO Wise Percentage %
C01	11.08	88.64
C02	14.38	115.04
C03	12.27	98.13
C04	9.93	79.44
Average	**11.91**	**95.31**

CIE - CO Wise Sum Formula
C01 = ASG(C01) + Q1(C01) + BestOfQ2&Q3(C01)
C02 = ASG(C02) + Q1(C02) + BestOfQ4&Q5(C02)
C03 = ASG(C03) + Q1(C03) + BestOfQ2&Q3(C03)
C04 = ASG(C04) + Q1(C04) + BestOfQ4&Q5(C04)

CIE - CO Wise Percentage
C01 % = {C01 SUM/total C01 Marks(12.5)}*100
C02 % = {C02 SUM/total C02 Marks(12.5)}*100
C03 % = {C03 SUM/total C03 Marks(12.5)}*100
C04 % = {C04 SUM/total C04 Marks(12.5)}*100

SEE (End Exam) CO Wise Percentage		
C01-C04	**45.50**	**60.67**

SEE - CO Wise Percentage
C01-C04 = End Exam Avg Marks

SEE - CO Wise Percentage
C01-C04 % = (End Exam Avg Marks/75)*100

CO ATTAINMENT	Internal Marks %	Internal Attainment	External Marks %	External Attainment	DIRECT ATTAINMENT LEVEL	Indirect Attainment	ATTAINMENT LEVEL
CO1	**89**	**3**	**60.67**	**3**	**3**	**2.2**	**2.84**
CO2	**115**	**3**	**60.67**	**3**	**3**	**2.4**	**2.88**
CO3	**98**	**3**	**60.67**	**3**	**3**	**2.3**	**2.86**
CO4	**79**	**3**	**60.67**	**3**	**3**	**2.2**	**2.84**
Average							**2.855**

EXTERNAL EXAM / FINAL ATTAINMENT LEVEL SCALE		
Attainment Levels	0	<=39
	1	40-49
	2	50-59
	3	>=60

INTERNAL EXAM ATTAINMENT LEVEL SCALE		
Attainment Levels	0	<=49
	1	50-59
	2	60-69
	3	>=70

Direct Attainment %
C01=(CO1IntAtn*0.25+CO1ExtAtn*0.7
C02=(CO2IntAtn*0.25+CO2ExtAtn*0.7
C03=(CO3IntAtn*0.25+CO3ExtAtn*0.7
C04=(CO4IntAtn*0.25+CO4ExtAtn*0.7

CO-PO Matrix																
Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	Attainment
CO1	2	1	1	0	0	2	2	0	0	0	0	1	1	1	1	0.80
CO2	3	1	2	1	2	1	1	0	0	0	0	1	1	1	3	1.13
CO3	2	0	1	0	1	2	2	0	0	0	0	1	1	2	3	1.00
CO4	3	2	2	1	2	2	2	0	0	0	0	2	1	2	3	1.47
Average	**2.5**	**1**	**1.5**	**0.5**	**1.25**	**1.75**	**1.75**	**0**	**0**	**0**	**0**	**1.25**	**1**	**1.5**	**2.5**	**1.1**

Final Attainment %
C01 = (DIRECT ATTAINMENT*0.8) + (INDIRECT ATTAINMENT*0.2)
C02 = (DIRECT ATTAINMENT*0.8) + (INDIRECT ATTAINMENT*0.2)
C03 = (DIRECT ATTAINMENT*0.8) + (INDIRECT ATTAINMENT*0.2)
C04 = (DIRECT ATTAINMENT*0.8) + (INDIRECT ATTAINMENT*0.2)

Course PO Attainments															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Direct Attainment	2.38	0.95	1.43	0.48	1.19	1.67	1.67	0	0	0	0	1.19	0.95	1.43	2.38
Indirect Attainment	**1.92**	**0.67**	**1.18**	**0.57**	**0.87**	**1.36**	**1.41**	**0**	**0**	**0**	**0**	**0.93**	**0.71**	**1.16**	**2.08**
Final Attainment	**2.29**	**0.90**	**1.38**	**0.49**	**1.13**	**1.60**	**1.61**	**0**	**0**	**0**	**0**	**1.14**	**0.90**	**1.37**	**2.32**

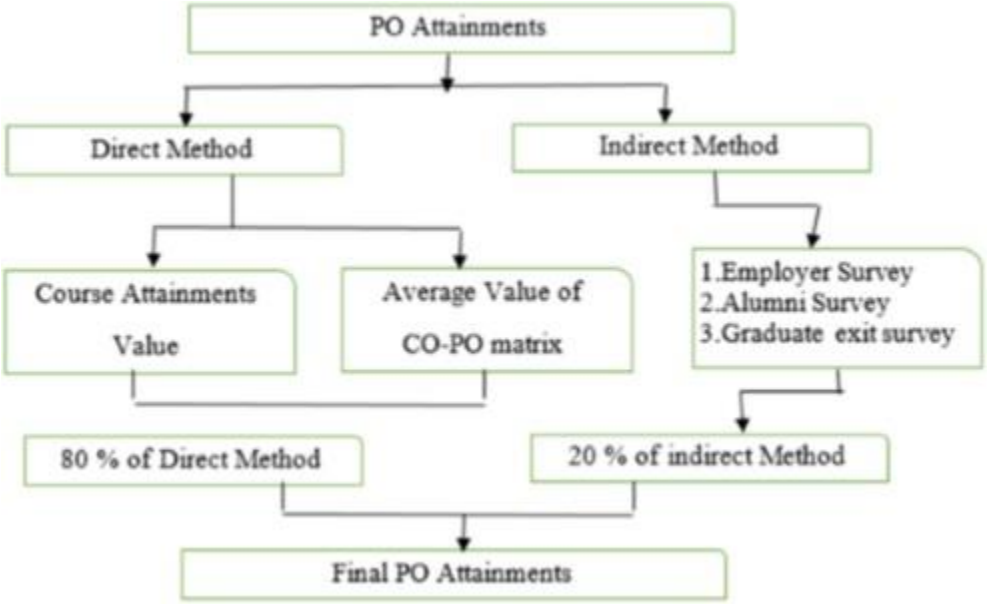
PO ATTAINMENTS
DIRECT ATTAINMENT-PO1= {(CO1-PO1)*CO1 ATTAINTMENT}+{(CO2-PO1(2))*CO2 ATTAINTMENT}+{(CO3-PO1)*CO3 ATTAINTMENT}+{(CO4-PO1)*CO4 ATTAINTMENT}
Similar for PO2 TO PO12 & PSO1 TO PSO3
NDIRECT ATTAINMENT-PO1 = {(ROW1-PO1)/SUM OF PO1 IN CO-PO MATRIX TABLE}=(30/1
Similar for PO2-PO12 & PSO1 TO PSO3
FINAL ATTAINMENT = (DIR ATNM-PO1)*0.8 + (INDIR ATNM-PO1)*0.2

3.3 ***Attainment of Program Outcomes and Program Specific Outcomes*** *(50)* Total Marks 50.00

3.3.1 Describe the assessment tools and processes used for measuring the attainment of each of the Program Outcomes and Program Specific Outcomes *(10)* *Institute Marks : 10.00*

DIRECT ATTAINMENT

Fig 3.3.1 Flowchart of Program Outcomes



PROCEDURE FOLLOWED TO MEASURE PO AND PSO ATTAINMENT

Assessment tools & processes used for measuring the attainment of each of Program Outcomes and Program Specific Outcomes.

The following methods of assessment are identified for assessing the Program Outcomes & Program specific outcomes.

LIST OF ASSESSMENT TOOLS AND PROCESS

Direct method:

- *Continuous Internal Evaluation (CIE) – Mid Exams*
- *Semester End Examinations (SEE)*
- *Practical tests - Labs*
- *Projects*
- *Seminar Presentations*

Indirect method (Stake Holders):

- *Employer Survey (Industry Survey)*
- *Alumni Survey*
- *Graduate Exit Survey*

THE QUALITY/RELEVENCE OF ASSESSMENT TOOLS AND PROCESSES USED

In Direct Method*, for each course CO attainment is calculated based on the student performance in both internal and external examinations. The CO attainment values are used to calculate the attainments of POs and PSOs for that course using CO - PO matrix and CO- PSOs matrix.*

In Indirect Method *survey of various stake holders like Employer, Alumni, and Graduate (passouts) are considered for evaluation.*

- ***Employer Survey (Industry Survey)***

The survey provides information about the quality of education provided at institutions, by asking employers to provide feedback about the generic skills, technical skills and work readiness of the graduate employed in their workplace

- ***Alumni Survey***

The survey asks alumni to evaluate the impact of their undergraduate education on their critical thinking, problem solving, and other learning outcomes.

- ***Graduate Exit Survey***

The survey is conducted by the department from Students who have graduated and ready for job or higher studies. This survey consist of questions based on student observations regarding education skills, Program Educational Objectives (PEOs) like students satisfaction level, ProgramOutcomes (POs) Assessment like knowledge attained after completion of program, and feedback for better improvement of the institute for future.

CRITERIA 4:

STUDENTS' PERFORMANCE TOTAL MARKS 150.00

4 STUDENTS' PERFORMANCE (150) Total Marks 85.61

Table 4a

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2021-22 (CAY)	2020-21 (CAYm1)	2019-20 (CAYm2)	2018-19 (CAYm3)	2017-18 (CAYm4)	2016-17 (CAYm5)	2015-16 (CAYm6)	2014-15 (CAYm7)
Sanctioned intake of the program(N)	60	60	180	180	180	180	180	180
Total number of students admitted in first year minus number of students migrated to other programs/ institutions plus No. of students migrated to this program (N1)	23	49	79	83	127	138	159	54
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	-	17	34	18	31	35	16	7
Separate division students, If applicable (N3)	0	0	0	0	0	0	0	0
Total number of students admitted in the program (N1 + N2 + N3)	23	66	113	101	158	173	175	61

Table 4b

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated **without backlogs** in any semester/ year of study (Without Backlog means no compartment or failures in any semester/ year of study)			
		I year	II year	III year	IV year
2021-22 (CAY)	23	-	-	-	-
2020-21 (CAYm1)	66 (49 + 17 + 0)	10	-	-	-
2019-20 (CAYm2)	113 (79 + 34 + 0)	14	16	-	-
2018-19 (CAYm3)	101	15	14	11	-
2017-18 (LYG)	158	21	20	18	13
2016-17 (LYGm1)	173	19	19	18	18
2015-16 (LYGm2)	175	18	18	18	18
2014-15 (LYGm3)	61	11	10	9	9

Table 4c

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog + without Backlog]			
		I year	II year	III year	IV year
2021-22 (CAY)	23	-	-	-	-
2020-21 (CAYm1)	66 (49 + 17 + 0)	42	-	-	-
2019-20 (CAYm2)	113 (79 + 34 + 0)	69	103	-	-
2018-19 (CAYm3)	101	58	40	70	-
2017-18 (LYG)	158	125	115	66	45
2016-17 (LYGm1)	173	135	143	118	54
2015-16 (LYGm2)	175	133	128	93	51
2014-15 (LYGm3)	61	52	59	59	51

4.1 Enrolment Ratio (20)

Total Marks 12.00

Institute Marks: 12.00

	N (From Table 4.1)	N1 (From Table 4.1)	Enrollment Ratio [(N1/N) *100]
2021-22 (CAY)	60	23	40
2020-21 (CAYm1)	60	49	81.6
2019-20 (CAYm2)	180	79	43.89
2018-19 (CAYm3)	180	83	46.11

Average [(ER1 + ER2 + ER3) / 3]: 55.16

Assessment: 12.00

4.2 Success Rate in the stipulated period of the program (40)

Total Marks 12.70

4.2.1 Success rate without backlogs in any semester / year of study (25)

Institute Marks : 3.00

Item	Latest Year of Graduation, LYG (2017-2018)	Latest Year of Graduation minus 1, LYGm1 (2016-17)	Latest Year of Graduation minus 2, LYGm2 (2015-16)	Latest Year of Graduation minus 3, LYGm3 (2014-15)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and separated division, if applicable	158	173	175	61
Y Number of students who have graduated without backlogs in the stipulated period	13	18	18	9
Success Index [SI = Y / X]	0.09	0.1	0.1	0.15

Average SI [(SI1 + SI2 + SI3) / 3]: 0.11

Assessment [25 * Average SI]: 2.91

4.2.2 Success rate in stipulated period (15)

Institute Marks : 9.70

Item	Latest Year of Graduation, LYG (2017-2018)	Latest Year of Graduation minus 1, LYGm1 (2016-17)	Latest Year of Graduation minus 2, LYGm2 (2015-16)	Latest Year of Graduation minus 3, LYGm3 (2014-15)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and separated division, if applicable	158	173	175	61
Y Number of students who have graduated in the stipulated period	45	54	51	51
Success Index [SI = Y / X]	0.29	0.31	0.29	0.84

Average SI [(SI1 + SI2 + SI3) / 3]: 0.48

Assessment [15 * Average SI]: 7.2

Note : If 100% students clear without any backlog then also total marks scored will be 40 as both 4.2.1 & 4.2.2 will be applicable simultaneously.

4.3 Academic Performance in Third Year (15)

Total Marks 8.26

Institute Marks: 8.26

Academic Performance	CAYm1 (2020-21)	CAYm2 (2019-20)	CAYm3 (2018-19)	CAYm4 (2017-18)
Mean of CGPA or mean percentage of all successful students(X)	6.74	7.5	6.6	5.83
Total number of successful students(Y)	70	66	118	93
Total number of students appeared in the examination(Z)	70	115	143	128
API [X*(Y/Z)]:	6.74	4.30	5.45	4.24

Average API [(AP1 + AP2 + AP3)/3]: 4.66

Assessment [1.5 * Average API]: 6.99

4.4 Academic Performance in Second Year (15)

Total Marks 8.52

Institute Marks: 8.52

Academic Performance	CAYm1 (2020-21)	CAYm2 (2019-20)	CAYm3 (2018-19)	CAYm4 (2017-18)
Mean of CGPA or mean percentage of all successful students(X)	4.97	6.54	7.2	7
Total number of successful students (Y)	103	40	115	143
Total number of students appeared in the examination (Z)	103	77	156	170
API [X * (Y/Z)]	4.97	3.39	5.31	5.89

Average API [(AP1 + AP2 + AP3)/3] : 4.86

Assessment [1.5 * AverageAPI] : 7.29

4.5 Placement, Higher Studies and Entrepreneurship (40) Total Marks 24.13

Institute Marks: 24.13

Item	CAYm1 (2020-21)	CAYm2 (2019-20)	CAYm3 (2018-19)	CAYm4 (2017-18)
Total No of Final Year Students(N)	89	118	93	59
No of students placed in the companies or government sector(X)	32	31	30	20
No of students admitted to higher studies with valid qualifying scores (GATE orequivalent State or National Level tests, GRE, GMAT etc.) (Y)	8	6	16	9
No of students turned entrepreneur in engineering/technology (Z)	2	5	2	0
x + y + z =	42	42	48	29
Placement Index [(X+Y+Z)/N] :	0.47	0.35	0.52	0.49

Average Placement [(P1 + P2 + P3)/3]: 0.45

Assessment [40 * Average Placement]: 18

Program Name: B. Tech, Mechanical Engineering

Assessment Year Name: CAYm1

S.No	Roll Number	Candidate Name	Branch	Company	Reference Number
1	17RT1A0301	ABDUL MANNAN BAIG	MECH	Euthissa Care Technology Pvt Ltd	ECT/NSAKCET/A746
2	18D95A0311	Syed Maaz Uddin	MECH	Euthissa Care Technology Pvt Ltd	ECT/NSAKCET/R762
3	18RT5A0301	Adil Mohammed Saiful Islam	MECH	Euthissa Care Technology Pvt Ltd	ECT/NSAKCET/A747
4	17RT1A0330	Mohammed Abdul Wajid	MECH	Pie Infocomm	PIE/ACD/NSAK1030
5	17RT1A0343	Mohammed Imran	MECH	Pie Infocomm	PIE/ACD/NSAK1043
6	18RT5A0326	Mohammed Sadiq	MECH	Pie Infocomm	PIE/ACD/NSAK1026
7	18RT5A0328	Shaheda Mahreen	MECH	Pie Infocomm	PIE/ACD/NSAK1028
8	17RT1A03A7	Syed Fardeen Ali	MECH	Path Creators Solutions Pvt. Ltd	PCSTECH/HYD0637
9	18RT5A0305	Habeeb Ahmed	MECH	Path Creators Solutions Pvt. Ltd	PCSTECH/HYD0635
10	17RT1A0357	Mohammed Shaher Yaskhan	MECH	Texmo Industries	TARO/ST/1019

11	17RT1A0379	Khaleel ur Rahema	MECH	Texmo Industries	TARO/ST/1023
12	17RT1A0383	Mohd Parvez	MECH	Texmo Industries	TARO/ST/1026
13	18RT5A0305	Ibrahim Bin Hasan	MECH	Texmo Industries	TARO/ST/1029
14	17RT1A0386	Sulemaan Uddin Ali Khan	MECH	Unistring Tech Solutions	UTS/DES1045/21
15	17RT1A0389	Musaib Mohiuddin	MECH	Unistring Tech Solutions	UTS/DES1048/21
16	18RT5A0311	Md Shoieb Khan	MECH	Unistring Tech Solutions	UTS/DES1049/21
17	17RT1A03A0	Shaik Sami ur Rahman	MECH	NSAKCET	
18	18RT5A0319	Mohammed Shoaib Khan	MECH	Reliance JIO	
19	18RT5A0323	MOHD ASEEM UDDIN	MECH	Tech Mahindra	806798/1871987/Permit
20	17RT1A0332	MOHAMMED ABDULLAH GHORI	MECH	DRDL	1121
21	17RT1A0301	ABDUL MANNAN BAIG	MECH	Tech Mahindra	806798/1871988/Permit
22	18RT5A0326	MOHD SADIQ	MECH	Unify Facility Management Pvt. Ltd	
23	17RT1A0301	ABDUL MANNAN BAIG	MECH	Euthissa Care Technology Pvt Ltd	ECT/NSAKCET/A746
24	18D95A0311	Syed Maaz Uddin	MECH	Euthissa Care Technology Pvt Ltd	ECT/NSAKCET/R762
25	18RT5A0301	Adil Mohammed Saiful Islam	MECH	Euthissa Care Technology Pvt Ltd	ECT/NSAKCET/A747
26	17RT1A0330	Mohammed Abdul Wajid	MECH	Pie Infocomm	PIE/ACD/NSAK1030
27	17RT1A0343	Mohammed Imran	MECH	Pie Infocomm	PIE/ACD/NSAK1043
28	18RT5A0326	Mohammed Sadiq	MECH	Pie Infocomm	PIE/ACD/NSAK1026
29	18RT5A0328	Shaheda Mahreen	MECH	Pie Infocomm	PIE/ACD/NSAK1028
30	17RT1A03A7	Syed Fardeen Ali	MECH	Path Creators Solutions Pvt. Ltd	PCSTECH/HYD0637
31	18RT5A0305	Habeeb Ahmed	MECH	Path Creators Solutions Pvt. Ltd	PCSTECH/HYD0635
32	17RT1A0357	Mohammed Shaher Yaskhan	MECH	Texmo Industries	TARO/ST/1019

Assessment Year Name: CAYm2

S.No	Student Name	Enrollment No	Employer Name	Appointment No
1	Md Zubair uddin	17RT5A0308	nQuantum	NQSD/QT308/2020
2	Mohammed siddiq khan	17RT5A0316	nQuantum	NQSD/QT316/2020
3	Mohd Javeed Ali	17RT5A0319	nQuantum	NQSD/QT319/2020
4	M A Tayyab	16RT1A0307	SPR Human Capital Solutions	TSE/SPR14013/20
5	Mohammed siddiq khan	17RT5A0316	SPR Human Capital Solutions	TSE/SPR14015/20
6	Mohd Javeed Ali	17RT5A0319	SPR Human Capital Solutions	TSE/SPR14016/20
7	Shaik Aafaq Akram	15RT1A03B6	Euthissa Care Technology	ECT/NSAKCET/ME758
8	M A Tayyab	16RT1A0307	Euthissa Care Technology	ECT/NSAKCET/ME759
9	MD Khaja Qutub Uddin Nawaz	16RT1A0310	Euthissa Care Technology	ECT/NSAKCET/ME760
10	MD Muzaffar Ullah Khan	16RT1A0313	Zuti Engg Solutions Pvt. Ltd	ZUTIES/OLCAE0313
11	Mohammed Abdul Shukoor	16RT1A0322	Euthissa Care Technology	ECT/NSAKCET/ME762
12	Mohammed Ahsan Ali	16RT1A0325	Euthissa Care Technology	ECT/NSAKCET/ME763
13	Mohammed Arshad Hussain	16RT1A0326	Euthissa Care Technology	ECT/NSAKCET/ME764
14	Mohammed Asim Uddin	16RT1A0328	Magneq Software	Trainee/MS0014/2021
15	Mohammed Hassan Khan	16RT1A0334	Magneq Software	Trainee/MS0013/2021
16	Mohammed Khundmir Mehdi	16RT1A0337	Zuti Engg Solutions Pvt. Ltd	ZUTIES/OLCAE0337
17	Mohammed Zuhaib Ali	16RT1A0351	Plastech Engineering	PROE2020/PLEC11214
18	Mohd Abdul Khader	16RT1A0359	Plastech Engineering	PROE2020/PLEC21214
19	Mohammed Fazal Uddin Juniadi	16RT1A0364	Plastech Engineering	PROE2020/PLEC31214
20	Mohd Salman Moiz	16RT1A0385	Plastech Engineering	PROE2020/PLEC41214
21	Muzzakir Hashma	16RT1A0392	Plastech Engineering	PROE2020/PLEC51214
22	Shaik Abdul Imran	16RT1A0394	Unistring Tech Solutions	UTS2901_MECH_FITTER_2020/21
23	Shaik Mujahed	16RT1A0396	Unistring Tech Solutions	UTS2902_MECH_FITTER_2020/21
24	Syed Nayeemuddin Ahmed	16RT1A03B7	Unistring Tech Solutions	UTS2905_MECH_FITTER_2020/21
25	Syed Shujauddin	16RT1A03C0	Unistring Tech Solutions	UTS2906_MECH_FITTER_2020/21
26	Tariq Hassan Baharmuz	16RT1A03C4	Unistring Tech Solutions	UTS2908_MECH_FITTER_2020/21
27	Shaik Mohammed Anas	16RT1A03D0	Unistring Tech Solutions	UTS2911_MECH_FITTER_2020/21

28	Abdul Yousuf Khan	17RT5A0303	Unistring Tech Solutions	UTS2915_MECH_FITTER_2020/21
29	Abdul Rahman	17RT5A0304	Shrinath Rotopack Pvt Ltd	CDESRPL/HYD1012/2020
30	MD Lukman	17RT5A0305	Shrinath Rotopack Pvt Ltd	CDESRPL/HYD1022/2020
31	MD Syed Aalam	17RT5A0307	Shrinath Rotopack Pvt Ltd	CDESRPL/HYD1032/2020

Assessment Year Name: CAYm3

S.No	Student Name	Enrollment No	Employer name	Appointment No
1	ABDUL HASEEB	15RT1A0301	The Hyderabad Deccan Cigarette Factory Pvt. Ltd.	THD/TEOL002/2019
2	AMER SALEEM	15RT1A0311	The Hyderabad Deccan Cigarette Factory Pvt. Ltd.	THD/TEOL003/2019
3	M A JAWAD	15RT1A0319	The Hyderabad Deccan Cigarette Factory Pvt. Ltd.	THD/TEOL004/2019
4	MIR FAROOQ ALI KHAN	15RT1A0328	The Hyderabad Deccan Cigarette Factory Pvt. Ltd.	THD/TEOL005/2019
5	MOHAMMAD ANWAR PASHA	15RT1A0333	The Hyderabad Deccan Cigarette Factory Pvt. Ltd.	THD/TEOL006/2019
6	MOHAMMED ABDUL MOIED	15RT1A0344	The Hyderabad Deccan Cigarette Factory Pvt. Ltd.	THD/TEOL007/2019
7	MOHAMMED ANAS AHMED	15RT1A0353	The Hyderabad Deccan Cigarette Factory Pvt. Ltd.	THD/TEOL008/2019
8	MOHAMMED FAHAD	15RT1A03357	The Hyderabad Deccan Cigarette Factory Pvt. Ltd.	THD/TEOL009/2019
9	ABDUL QUADER	15RT1A0303	Golconda Textiles Pvt. Ltd.	GT/JE1012/2019
10	GULAM AHMED	15RT1A0315	Golconda Textiles Pvt. Ltd.	GT/JE1013/2019
11	MANIAR SAMEER AHMED	15RT1A0321	Golconda Textiles Pvt. Ltd.	GT/JE1014/2019
12	MIR MUDASSIR ALI	15RT1A0329	Golconda Textiles Pvt. Ltd.	GT/JE1015/2019
13	MOHAMMED ABDUL AHAD	15RT1A0336	Golconda Textiles Pvt. Ltd.	GT/JE1016/2019
14	MOHAMMED ABDUL MOIZ	15RT1A0345	Golconda Textiles Pvt. Ltd.	GT/JE1017/2019
15	MOHD ATHIQUE AHMED HUSSAIN	15RT1A0354	Golconda Textiles Pvt. Ltd.	GT/JE1018/2019
16	AHMED MOHD MAQDOOM	15RT1A0307	GB Bakers Industries Pvt. Ltd.	GBI/JME/05/2019
17	MD ASHRAF	15RT1A0323	GB Bakers Industries Pvt. Ltd.	GBI/JME/06/2019

18	ZAKARIYA ABDUL MALIK	16RT5A0316	GB Bakers Industries Pvt. Ltd.	GBI/JME/07/2019
19	SALLA ASHOK	16RT5A0309	GB Bakers Industries Pvt. Ltd.	GBI/JME/08/2019
20	SYED ISHAQ MOHIUDDIN	15RT1A03C9	GB Bakers Industries Pvt. Ltd.	GBI/JME/09/2019
21	MOHD SHAHAB SULTAN	15RT1A03A3	GB Bakers Industries Pvt. Ltd.	GBI/JME/10/2019
22	MOHD IMRAN	15RT1A0394	GB Bakers Industries Pvt. Ltd.	GBI/JME/11/2019
23	MOHAMMED MASIUDDIN	15RT1A0373	SKH Infotech	SKH/ASDOL/10042019
24	MOHD AHMED KHAN	15RT1A0387	SKH Infotech	SKH/ASDOL/10052019
25	MOHD HAMEED UDDIN JAFAR	15RT1A0392	SKH Infotech	SKH/ASDOL/10062019
26	MOHAMMED SHOAIB	15RT1A0378	Genesis Solutions Pvt. Ltd.	GS/WD0058/2019
27	MOHD ABDUL SHAKEEL	15RT1A0384	Genesis Solutions Pvt. Ltd.	GS/WD0059/2019
28	SYEDA MAVIA JAVEED	15RT1A03D9	Genesis Solutions Pvt. Ltd.	GS/WD0060/2019
29	SOHAIB ZAMA SAVANOOR	16RT5A0311	Classic Consulting Assosiates	CSAJDE/00102019
30	SYED MUBEEN	16RT5A0314	Classic Consulting Associates	CSAJDE/00112019

Assessment Year Name: CAYm4

S.No	Student Name	Enrollment No	Employer name	Appointment No
1	SYED NUMAN AHMED	14RT1A0304	Plastech Engineering Co.	PL/TE158/2018
2	MOHD KHAJA ARFATH UDDIN	14RT1A0305	Plastech Engineering Co.	PL/TE159/2018
3	ANSAR MOHAMMED KHAN	14RT1A0308	Plastech Engineering Co.	PL/TE156/2018
4	MOHD FARAZ	14RT1A0309	Plastech Engineering Co.	PL/TE154/2018
5	MIR WAJAHATH ALI	14RT1A0314	Plastech Engineering Co.	PL/TE155/2018
6	GUGULOTH DURGALAL	14RT1A0316	Plastech Engineering Co.	PL/TE157/2018
7	MOHD HABEEB AHMED	13RT1A0384	Plastech Engineering Co.	PL/TE153/2018

8	TAYYAB MOHIUDDIN	14RT1A0318	Golconda Textiles Pvt. Ltd.	GT/GET014/2018
9	MOHD YASER UDDIN	14RT1A0321	Golconda Textiles Pvt. Ltd.	GT/GET016/2018
10	MOHAMMED JUNAID ILYAS	14RT1A0323	Golconda Textiles Pvt. Ltd.	GT/GET017/2018
11	SHAIK QADEER FAIZAN	14RT1A0335	Golconda Textiles Pvt. Ltd.	GT/GET018/2018
12	IRSHAD AHMED KHAN	14RT1A0339	Golconda Textiles Pvt. Ltd.	GT/GET013/2018
13	SHAIK JAWAD AHMED	15RT5A0305	Golconda Textiles Pvt. Ltd.	GT/GET015/2018
14	MOHD ABDUL RAHMAN KHAN	14RT1A0349	The Hyderabad Deccan Cigarette Factory Pvt. Ltd.	THD/TDE1120/2018
15	MD MADNI SULTAN	15RT5A0301	The Hyderabad Deccan Cigarette Factory Pvt. Ltd.	THD/TDE1121/2018
16	MOHAMMED MUJAHIDUDDIN	15RT5A0302	The Hyderabad Deccan Cigarette Factory Pvt. Ltd.	THD/TDE1122/2018
17	MOHD TABRAIZUDDIN	15RT5A0303	The Hyderabad Deccan Cigarette Factory Pvt. Ltd.	THD/TDE1123/2018
18	SHAIK ABDUL MUKHTADIR SALMAN	15RT5A0304	GB Bakers Industries Pvt. Ltd.	GBI/CE01/2018
19	SYED ABDUL GHOUSE	15RT5A0306	GB Bakers Industries Pvt. Ltd.	GBI/CE02/2018
20	SYED MUJTABA AHMED	15RT5A0307	GB Bakers Industries Pvt. Ltd.	GBI/CE03/2018

4.6 Professional Activities (20) Total Marks 20.00

4.6.1 Professional societies/ chapters and organizing engineering events (5) Institute Marks: 5.00

Table .4.6.1. a: List of Professional Societies

S. No	Professional Societies	CHAPTER NAME
1	ISHRAE (Indian Society of Heating, Refrigerating and Air Conditioning Engineers).	Deccan chapter Student

Student activities form an important part of ISHRAE's aims & objectives.

ISHRAE encourages formation of Student Events

ISHRAE has been proudly sponsoring innumerable International and Domestic events, spreading endless insight on HVACR industry. Every Event organized under ISHRAE, holds a specific place towards building a new technology world.

Benefits to Student

- Student Membership of one of the vibrant professional bodies.
- Access to ISHRAE e-Journal, covering lot of technical articles.
- Participation in National level Quiz and Design Competitions.
- Interaction with Industry professionals (Networking).
- Discounts on ISHRAE Books & local ISHRAE Chapter.
- Career Guidance & opportunities.
- Grants available to conduct Research Projects

ISHRAE Coordinator Name: Mr.RAZA AHMED KHAN, Associate Professor, MECH, Engg, Dept.

- Total Number of Initial Membership: (List Enclosed).
- Proposed Date of Chapter Installation: **15-SEPTEMBER-2021**
- Date of Chapter Installation: **15-SEPTEMBER-2021**
- Names of Proposed Office Bearers of the Student-Chapter:

S.No	Designation	Name of Member
1	President	Affan Rasheed
2	President Elect	Mohd Amir Khan
3	Secretary	Syed Abdul Rehman Anas
4	Treasurer	Aqib Ahmed
5	CWC Member	Mohammed Zubair Khan

ISHRAE Coordinator Name: Mr.RAZA AHMED KHAN, Associate Professor, MECH, Engg, Dept.

- Total Number of Initial Membership: (List Enclosed).
- Proposed Date of Chapter Installation: **11-SEPTEMBER-2020**
- Date of Chapter Installation: **12-SEPTEMBER-2020**
- Names of Proposed Office Bearers of the Student-Chapter:

S.No	Designation	Name of Member
1	President	Mirza Shujathullah Baig

2	President Elect	Md Tariq Anwar
3	Secretary	Mohd Saddam Hussain
4	Treasurer	Mohammed Abdur Raheem
5	CWC Member	Syed Junaid Akbar Hussaini
6	CWC Member	Mujeeb Ahmed

ISHRAE Coordinator Name: Mr.RAZA AHMED KHAN, Associate Professor,

MECH, Engg, Dept.Total Number of Initial Membership: (List Enclosed).

Proposed Date of Chapter Installation: **04-January-2020**

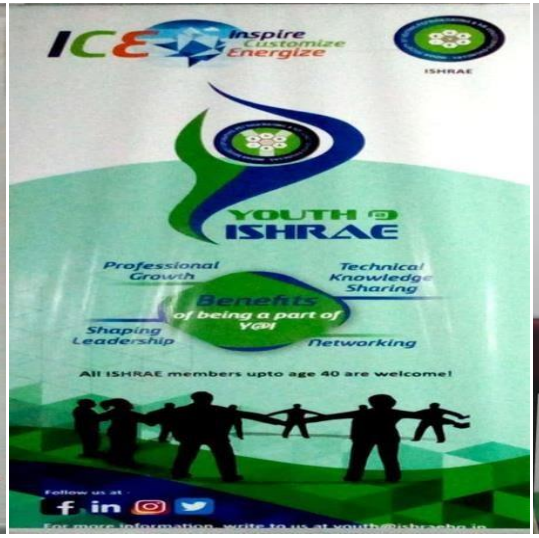
Date of Chapter Installation: **06-January-2020**

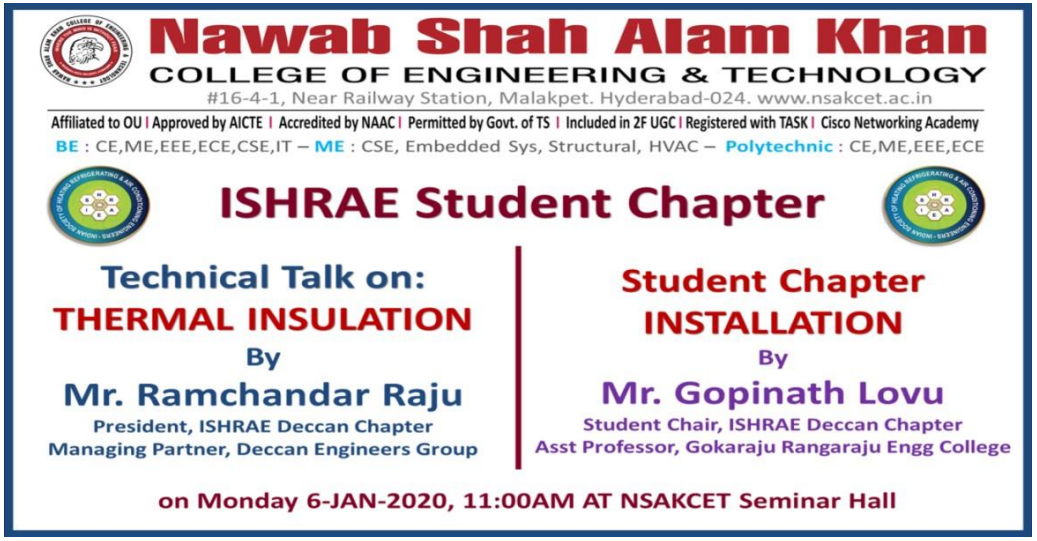
Names of Proposed Office Bearers of the Student-Chapter:

S.No	Designation	Name of Member
1	President	Syed Junaid Uddin
2	President Elect	Mohammed KaleemUllah
3	Secretary	Mirza Shujathullah Baig
4	Treasurer	Mujeeb Ahmed
5	CWC Member	Mohd Saddam Hussain
6	CWC Member	Syeda Rida

The following engineering events/activities were conducted for students under -Youth ISHRAE Banner.

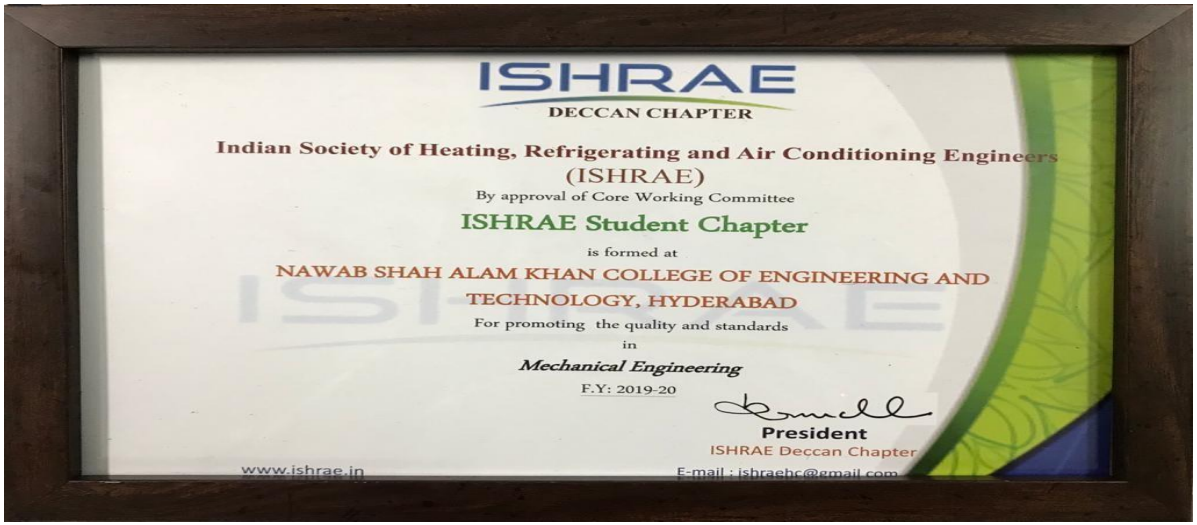
S.No	Name of Event	Date	Year
1	ISHRAE 1st NATIONAL LEVEL QUIZ COMPETITION	27-07-2020 to 29-07-2020	2020
2	Industrial Visit to RSP Air Products	13-02-2020	2020
3	Technical talk on Thermal Insulation	06-01-2020	2020





Proposed Initial Activities:

Activity	Proposed Date
CWC Installation	06.01.2020
CWC Meeting	06.01.2020
Technical Lectures	06.01.2020



ISHRAE

DECCAN CHAPTER

Indian Society of Heating, Refrigerating and Air Conditioning Engineers

(ISHRAE)

By approval of Core Working Committee

ISHRAE Student Chapter

is formed at

NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, HYDERABAD

For promoting the quality and standards

in

Mechanical Engineering

F.Y: 2019-20

President

ISHRAE Deccan Chapter

www.ishrae.in

E-mail : ishraehc@gmail.com

The following engineering events/activities were conducted for students under - ISHRAE Banner.

Table 4.11 List of Seminars/Workshops conducted

S. No	Name of the Speaker	Topic	Date
1	Dr. RVSS Prasad, Head Business Development, Pavani Engineers, Hyderabad	Introduction to HVAC Projects Management	22-08-2020
2	Mr. Dilip Kumar Gopinath, Manager, Honeywell Environmental & Energy Solutions.	Building Management System (BMS) for MEP Services	15-08-2020
3	Mr. Kaleemullah Mohammed, Managing Director, Ecopact Constructions & MEP Academy, Hyderabad.	Ventilation Systems in Buildings and ISHRAE Guidelines for COVID-19	08-08-2020
4	Mr. Abdul Majeed, Leed Engineer, deltaT MEP Technical Academy, Bangalore	Evaluating Design Alternatives for HVAC in BIM Revit	25-07-2020
5	Mr. Anand Babu Rao, Associate Consultant, Genex Consultants, Hyderabad.	IAQ- Creating Healthier Spaces	18-07-2020
6	Mr. A Ramachandar Raju, Managing Partner, Deccan Engineers, Hyderabad.	Thermal Insulation for HVAC Systems	11-07-2020
7	Mr. Sandeep Galhotra, Founder Director, M/s Radiant Air Systems Pvt. Ltd.	Dynamics of Ducts	04-07-2020
8	Dr. Shivraj Dhaka, Counsellor, Indian Green Building Council (IGBC)	Green Buildings and Operational Benefits	27-06-2020
9	Mr. Syed Moazzam Ali, Technical Director, Taiba Engineering Consultants	ECBC Compliance for HVAC Systems	20-06-2020
10	Mr. K. Dheeraj, Regional Head For TS & AP, Conserve Consultants Pvt. Ltd.	Energy Conservation Measures in HVAC System	13-06-2020
11	Mr. Gopinath lovu, Student Chair, ISHRAE Deccan Chapter, Assistant Professor, Gokaraju Rangaraju Engineering College.	Installation of ISHRAE STUDENT CHAPTER	06/01/2020
12	Mr. A Ramachandar Raju, President IDC (ISHRAE Deccan Chapter)	Technical Talk on Thermal Insulation	06-01-2020
13	Mr.Anuj Gupta Youth Chair, ISHRAE Deccan Chapter	Installation of ISHRAE STUDENT CHAPTER	26-07-2018
14	Mr.Anuj Gupta Youth Chair, ISHRAE Deccan Chapter	Technical Talk on Energy Conservation	26-07-2018
15	Mr. A Ramachandar Raju, President IDC (ISHRAE Deccan Chapter)	Technical Talk on Thermal Insulation	29-04-2017
16	Mr. P.A. Prabhu Idc President And Mr.P.R.K. Sundar Idc Student Chair.	Installation of ISHRAE STUDENT CHAPTER	29-04-2017

Student Member Details: - 2021-22

S.No	Institute	Membership_no	Name	Mobile	Email	Registration_Date
1	Nawab Shah Alam Khan College of Engineering & Technology	S00099031	Mr. MOHD SHOEIB	7329894924	shoaibmohd6758@gmail.com	Sep 12 2021
2	Nawab Shah Alam Khan College of Engineering & Technology	S00098712	Mr. IMRAN KHAN	7075078636	imrankhan02720@gmail.com	Aug 31 2021
3	Nawab Shah Alam Khan College of Engineering & Technology	S00098711	Mr. Mohammad Omer	9441585601	omer92933@gmail.com	Aug 31 2021
4	Nawab Shah Alam Khan College of Engineering & Technology	S00098703	Mr. Mohd Farooq	7207362649	farooq.mohd990@gmail.com	Aug 30 2021
5	Nawab Shah Alam Khan College of Engineering & Technology	S00098665	Mr. MOHAMMED ABDUL MUBEEN QUREAISHI	7416619895	mubeen325@hotmail.com	Aug 28 2021
6	Nawab Shah Alam Khan College of Engineering & Technology	S00098656	Mr. Mohd Shakeb Ahmed	9849257953	shakebahmed98@gmail.com	Aug 28 2021
7	Nawab Shah Alam Khan College of Engineering & Technology	S00098635	Mr. Mohammed Irfan	6305865236	irfan69558@gmail.com	Aug 26 2021
8	Nawab Shah Alam Khan College of Engineering & Technology	S00097223	Mr. AQIB AHMED	6304739041	itsahmed360@gmail.com	Jul 23 2021
9	Nawab Shah Alam Khan College of Engineering & Technology	S00096628	Mr. Affan Rasheed	9700634951	affanrasheed123@gmail.com	Jul 10 2021
10	Nawab Shah Alam Khan College of Engineering & Technology	S00096569	Mr. Abdul Razzack Mohammed	9603720001	abdulrazzack1997@gmail.com	Jul 08 2021
11	Nawab Shah Alam Khan College of Engineering & Technology	S00096566	Mr. Mohammed Zubair Khan	8886950920	khanzubair788@gmail.com	Jul 08 2021
12	Nawab Shah Alam Khan College of Engineering & Technology	S00095982	Mr. SYED ABDUL REHMAN ANAS	9849826852	abdurrahmanppt1@gmail.com	Jun 22 2021
13	Nawab Shah Alam Khan College of Engineering & Technology	S00095977	Mr. MD ABID KHAN	8121996507	er.md.abid@gmail.com	Jun 22 2021
14	Nawab Shah Alam Khan College of Engineering & Technology	S00095869	Mr. Mohd Amir Khan	8686269636	amirkhan.engg@gmail.com	Jun 19 2021
15	Nawab Shah Alam Khan College of Engineering & Technology	S00094973	Mr. Mohd Abdul Muhaimin	9100240087	mamuhaimin91@gmail.com	Apr 26 2021
16	Nawab Shah Alam Khan College of Engineering & Technology	S00094972	Mr. Maqdoom Mohiuddin	8801175130	maqdoommohiuddin123@gmail.com	Apr 26 2021
17	Nawab Shah Alam Khan College of Engineering & Technology	S00094968	Mr. Abdul muqtadir Siddiqui Mohammed	7032768036	siddiq093@gmail.com	Apr 26 2021
18	Nawab Shah Alam Khan College of Engineering & Technology	S00094949	Mr. Md Tarique Anwar	9030290786	mdrabiulanwar@gmail.com	Apr 23 2021

19	Nawab Shah Alam Khan College of Engineering & Technology	S00094946	Mr. Syed Junaid AKBAR Akbar Hussaini	9704291959	junaidakbar87@gmail.com	Apr 22 2021
20	Nawab Shah Alam Khan College of Engineering & Technology	S00094945	Mr. Abdul Raheem Abdul Mohammed	8328490943	abdulraheem97@gmail.com	Apr 22 2021
21	Nawab Shah Alam Khan College of Engineering & Technology	S00085616	Mr. Atif Khan	9014414440	atifkhan9854@gmail.com	Nov 24 2019
22	Nawab Shah Alam Khan College of Engineering & Technology	S00085604	Mr. Nawaz Ahmed	8297479501	nawaz943@hotmail.com	Nov 23 2019

Student Member Details: - 2020-21

`	Institute Name	Student Name	Email Id	Branch	Date of joining	User Type	
1	Nawab Shah Alam Khan College of Engineering & Technology	Mr. MD TARIQUE ANWAR	mdrabiulanwar@gmail.com	Mechanical	Sat, September 12, 2020 4:51:47 PM	(NEW)	Details (/Ins_tute/Home/Details/85570)
2	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Mohammed Zubair Ali	mohammedzubair0786@gmail.com	Mechanical	Sat, September 12, 2020 5:43:17 PM	(NEW)	Details (/Ins_tute/Home/Details/85572)
3	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Abdul Raheem Mohammed	abdulraheem97@gmail.com	Mechanical	Sat, September 12, 2020 5:16:52 PM	(NEW)	Details (/Ins_tute/Home/Details/85571)
4	Nawab Shah Alam Khan College of Engineering & Technology	Mr. MOHD ABDUL MUHAIMIN	mamuhaimin91@gmail.com	Mechanical	Sat, September 12, 2020 2:09:27 PM	(NEW)	Details (/Ins_tute/Home/Details/85683)
5	Nawab Shah Alam Khan College of Engineering & Technology	Mr. mohammed saddam hussain	mdsaddamhussain781@gmail.com	Mechanical	Sat, September 12, 2020 2:09:27 PM	(NEW)	Details (/Ins_tute/Home/Details/85683)
6	Nawab Shah Alam Khan College of Engineering & Technology	Mr. mirza shujathullah baig	shujathbaig4724@gmail.com	Mechanical	Sat, September 12, 2020 1:54:55 PM	(NEW)	Details (/Ins_tute/Home/Details/85682)
7	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Atif Khan	Atifkhan9854@gmail.com	Mechanical	Sat, September 12, 2020 10:48:59 AM	(NEW)	Details (/Ins_tute/Home/Details/85616)

8	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Nawaz Ahmed	nawaz943@hotmail.com	Mechanical	Sat, September 12, 2020 12:10:10 PM	(NEW)	Details (/Ins_tute/Home/Details/85604)
9	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Mohammed Zubair Ali	mohammedzubair0786@gmail.com	Mechanical	Sat, September 12, 2020 5:43:17 PM	(NEW)	Details (/Ins_tute/Home/Details/85572)
10	Nawab Shah Alam Khan College of Engineering & Technology	Mr. MOHD ABDUL MUHAIMIN	mamuhaimin91@gmail.com	Mechanical	Sat, September 12, 2020 2:09:27 PM	(NEW)	Details (/Ins_tute/Home/Details/85683)

Student Member Details: - 2019-20

S No	Institute Name	Student Name	Email Id	Branch	Date of joining	User Type	
1	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Mohammed Abdul muqtadir Siddiqui	siddiq093@gmail.com	Mechanical	Sun, January 05, 2020 2:45:01 PM	(NEW)	Details (/Ins_tute/Home/Details/86971)
2	Nawab Shah Alam Khan College of Engineering & Technology	Mr. MOHD ABDUL MUHAIMIN	mamuhaimin91@gmail.com	Mechanical	Sat, November 30, 2019 2:09:27 PM	(NEW)	Details (/Ins_tute/Home/Details/85683)
3	Nawab Shah Alam Khan College of Engineering & Technology	Mr. mohammed saddam hussain	mdsaddamhussain781@gmail.com	Mechanical	Sat, November 30, 2019 2:09:27 PM	(NEW)	Details (/Ins_tute/Home/Details/85683)
4	Nawab Shah Alam Khan College of Engineering & Technology	Mr. mirza shujathullah baig	shujathbaig4724@gmail.com	Mechanical	Sat, November 30, 2019 1:54:55 PM	(NEW)	Details (/Ins_tute/Home/Details/85682)
5	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Atif Khan	Atifkhan9854@gmail.com	Mechanical	Sun, November 24, 2019 10:48:59 AM	(NEW)	Details (/Ins_tute/Home/Details/85616)
6	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Nawaz Ahmed	nawaz943@hotmail.com	Mechanical	Sat, November 23, 2019 12:10:10 PM	(NEW)	Details (/Ins_tute/Home/Details/85604)
7	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Syed junaid Akbar Hussaini	junaidakbar87@gmail.com	Mechanical	Fri, November 22, 2019 9:05:25 PM	(NEW)	Details (/Ins_tute/Home/Details/85583)

8	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Mohammed Zubair Ali	mohammedzubair0786@gmail.com	Mechanical	Fri, November 22, 2019 5:43:17 PM	(NEW)	Details (/Ins_tute/Home/Details/85572)
9	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Abdul Raheem Mohammed	abdulraheem97@gmail.com	Mechanical	Fri, November 22, 2019 5:16:52 PM	(NEW)	Details (/Ins_tute/Home/Details/85571)
10	Nawab Shah Alam Khan College of Engineering & Technology	Mr. MD TARIQUE ANWAR	mdrabiulanwar@gmail.com	Mechanical	Fri, November 22, 2019 4:51:47 PM	(NEW)	Details (/Ins_tute/Home/Details/85570)
11	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Mohd Yousuf	mohdyousuf178@gmail.com	Mechanical	Tue, September 17, 2019 3:00:42 PM	(NEW)	Details (/Ins_tute/Home/Details/82831)
12	Nawab Shah Alam Khan College of Engineering & Technology	Mr. md imran pasha	hyder.asad123@gmail.com	Mechanical	Fri, September 13, 2019 10:23:58 PM	(NEW)	Details (/Ins_tute/Home/Details/82647)
13	Nawab Shah Alam Khan College of Engineering & Technology	Ms. Syeda Rida	syedarida214@gmail.com	Mechanical	Fri, September 13, 2019 8:11:44 PM	(NEW)	Details (/Ins_tute/Home/Details/82633)
14	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Mohd Zubair Hussain	mohdzubair339@gmail.com	Mechanical	Thu, September 12, 2019 2:20:18 AM	(NEW)	Details (/Ins_tute/Home/Details/82525)
15	Nawab Shah Alam Khan College of Engineering & Technology	Mr. MD AFTAB ALAM	mdaab.alam.0607@gmail.com	Mechanical	Wed, September 11, 2019 9:38:24 PM	(NEW)	Details (/Ins_tute/Home/Details/82476)
16	Nawab Shah Alam Khan College of Engineering & Technology	Mr. kaleemullah Mohammed	kaleem84@yahoo.com	Mechanical	Tue, September 10, 2019 10:50:21 PM	(NEW)	Details (/Ins_tute/Home/Details/82413)
17	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Farhan Yar Khan	farhanmechanicaltech017@gmail.com	Mechanical	Tue, September 10, 2019 2:07:43 PM	(NEW)	Details (/Ins_tute/Home/Details/82391)
18	Nawab Shah Alam Khan College of Engineering & Technology	Mr. MOHAMMED ASIF ALI	asifali99945@gmail.com	Mechanical	Tue, September 10, 2019 12:20:58 AM	(NEW)	Details (/Ins_tute/Home/Details/82383)
19	Nawab Shah Alam Khan College of Engineering & Technology	Mr. SYED ISLAHUDDIN ZARAR	zararz786@yahoo.com	Mechanical	Mon, September 09, 2019 11:43:37 PM	(NEW)	Details (/Ins_tute/Home/Details/82382)

20	Nawab Shah Alam Khan College of Engineering & Technology	Mr. MD RASHID HUSSAIN	rsd.hussain.37@gmail.com	Mechanical	Mon, September 09, 2019 9:51:43 PM	(NEW)	Details (/Ins_tute/Home/Details/82380)
21	Nawab Shah Alam Khan College of Engineering & Technology	Mr. MOHD HABEEB UR RAHMAN	rahman.habeeb8790@gmail.com	Mechanical	Mon, September 09, 2019 9:27:59 PM	(NEW)	Details (/Ins_tute/Home/Details/82379)
22	Nawab Shah Alam Khan College of Engineering & Technology	Mr. MD ASHRAF	mohd.ashraf9672@gmail.com	Mechanical	Mon, September 09, 2019 10:44:45 AM	(NEW)	Details (/Ins_tute/Home/Details/82342)
23	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Syed Khalid Fazeel	khalidfazeel.kf@gmail.com	Mechanical	Tue, September 03, 2019 4:54:37 PM	(NEW)	Details (/Ins_tute/Home/Details/82139)
24	Nawab Shah Alam Khan College of Engineering & Technology	Mr. SYED JUNAID UDDIN	junaiduddin75@gmail.com	Mechanical	Sat, August 31, 2019 10:48:41 PM	(NEW)	Details (/Ins_tute/Home/Details/82038)
25	Nawab Shah Alam Khan College of Engineering & Technology	Mr. MOHAMMAD MOHAMMAD ZAKIUDDIN	zakiuddinm88@gmail.com	Mechanical	Sat, August 31, 2019 8:13:29 PM	(NEW)	Details (/Ins_tute/Home/Details/82032)
26	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Syed Imran Ahmed	258imran@gmail.com	Mechanical	Sat, August 31, 2019 1:16:10 PM	(NEW)	Details (/Ins_tute/Home/Details/82005)
27	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Mohammed Abdul Baseer	abdulbaseer847@gmail.com	Mechanical	Sat, August 31, 2019 8:52:18 AM	(NEW)	Details (/Ins_tute/Home/Details/81974)
28	Nawab Shah Alam Khan College of Engineering & Technology	Mr. Mohammed Tajammul Siddiq	tajammul.mohammed@yahoo.com	Mechanical	Fri, August 30, 2019 4:03:42 PM	(NEW)	Details (/Ins_tute/Home/Details/81898)

Academic year 2020-21 Organizing Engineering Events

S.NO	Name of the Event	Date	Year
1	Industrial Utilization of Shaper, Slotter & Plannet	16/11/2020 to 20/11/2020	2020
2	Galerkin’s Approach,	12/04/2021	2021
3	Analysis of circular shaft subjected to torsion	19/07/2021	2021

Academic year 2019-20 Organizing Engineering Events

S.NO	Name of the Event	Date	Year
1	EMPLOYABILITY OF ENGINEERING GRADUATES IN INDIA	14-11-2020	2020
2	Opportunities and Challenges for Mechanical Engineers in 21st century	21-10-2020	2020
3	Digital Installation of ISHRAE Student Chapter @ NSAKCET	12-09-2020	2020
4	Techno vision 2020	26-02-2020	2020
5	Career Guidance Workshop	14-02-2020	2020
6	Industrial Visit at RSP Air Product Pvt.Ltd	13-02-2020	2020

Academic year 2018-19 Organizing Engineering Events

S. No	Activities	Content	Co-ordinators	No of Students participated	Date	Associated Society
1	Guest Lecture	Programmes Career Opportunities and Future Prospects in the Department of Atomic Energy	Scientific Officers Mr.K.Vishwa Prasad and Mr. Hemasunder	III rd and IVth Btech students attended	22-01-2019	The Bhabha Atomic Research Center (BARC) , Nuclear Fuel Complex (NFC) Depart of Atomic Energy v(DAE),
2.	Seminar	Career Opportunities in HVAC Industries	Mr.Mohammed Altaf Hussain BE (Mech)	III rd and IVth Btech students attended	04-02-2019	Managing Partner –EDS Engineers
3.	Guest Lecture	Career Opportunities in Mechanical Engineers	Dr. Syed Mujahed Hussaini Professor, Vignan College of Engineering @ Technology	III rd and IVth Btech students attended	02-02-2019	Dept of Mech Engg, Nsak college of Engineering and Technology
4.	Guest Lecture	Industrial Exposure & Entrepreneur ladder for EEE & Mechanical Engg Students	Mr. Mohammed Aslam Shareef , CEO, Green Olive Control Systems,	III rd and IVth Btech students attended	07-08-2019	ISHRAE Deccan Student Chapter
5	Guest Lecture	Kinetics of Rigid Bodies	Mr. G.Venkateshwarlu Asst.Prof, Dept of Mech Engg, OU	II nd, III rd and IVth Btech students attended	16-04-2019	Dept of Mech Engg, Nsak college of Engineering and Technology,

6	Workshop	CAD/CAM Training Using Software ANSYS & CREO, AND Hands Practice on CNC Lathe & milling Machine.	Mr. Syed Zakiuddin Asst, Professor and Mr. AbdulRahman Khan Asst,Professor	IVth Btech students attended	10-01-2018	Dept of Mech Engg, Nsak college of Engineering and Technology
7.	Two days Workshop	Advance of I.C. Engines	Dr. AVSSKS Gupta Prof, Dept of Mech Engg JNTUH, and Dr. RamaKrishna Janamanchi, Asst General Manager, Cyient, Hyd	III rd and IV th Btech students attended	17th & 18th of Aug -2018	Dept of Mech Engg, Nsak college of Engineering and Technology,
8.	Two days Workshop	Developments in Production Industrial Application	Dr. M. Mansoor Hussain, Director of Admissions JNTUH	III rd and IV th Btech students attended	1st & 2nd of March of 2018	Dept of Mech Engg, Nsak college of Engineering and Technology,

4.6.2 Publication of technical magazines, newsletters, etc. (5) Institute Marks : 5.00

Table B.4.6.2 a: List of **Publication** of Newsletters and magazines of department

Academic Year	Technical Magazine/ News letter	Issues Per Year	Editors
2021-21	MECHOPEDIA	1	MOHAMMED TAHER, SYED AMER UR RAHMAN
2019-20	MECHOPEDIA	1	MOHAMMED TAHER, M AHMAD HUSSAIN
2018-19	MECHOPEDIA	1	SYED AMER UR RAHMAN, SHAIK HUSSAIN
2017-18	MECHOPEDIA	1	MOHAMMED TAHER, BABA SHARFUDDIN

Nawab Shah Alam Khan
COLLEGE OF ENGINEERING & TECHNOLOGY

MECHANICAL ENGINEERING

2018-2019

Nawab Shah Alam Khan
COLLEGE OF ENGINEERING & TECHNOLOGY

Mechanical Engineering

2019-2020

Nawab Shah Alam Khan
COLLEGE OF ENGINEERING & TECHNOLOGY

MECHANICAL ENGINEERING

2020 - 2021

4.6.3 Participation in inter-institute events by students of the program of study (10) Institute Marks: 10.00

Table .4.6.3: List of Participations or Awards in inter institute events by students.

Academic Year 2018-19

S. No.	Date	Participant/Student Name	Event & Venue	Award/place secured
1	28 to 30 Dec 2019	Mohammed Afwan Masi	4th Sports Tourism India	Merit Certificate
2	28 to 30 Dec 2019	Mohammed Shahbaaz	4th Sports Tourism India	Merit Certificate
3	26-Nov-19	B.Tech Students	Reliance Youth Sports Foundation	Participated/Won match
4	15 to 17 Nov 2019	Syed Ali Saifullah	1st 7-A side Cricket National Compionship 2019	Participated/ 4th place at all India level
5	15 to 17 Nov 2019	Syed Ali Saifullah	1st 7-A side football National Compionship 2019	Participated/ 3rd place at all India level
6	28-02-2018	B.Tech students	Techno -vision	Participated


Reliance Foundation | YOUTH SPORTS
OSMANIA MEDICAL COLLEGE


नालको NALCO
GAIL
IPSC
6th Sub-Junior & 15th Senior National Six-A-Side Cricket Championship
CHAMPIONS
OPPO F11


R.C. MAHESWARI MEMORIAL NATIONAL FOOTBALL CHAMPIONSHIP 2019, KISHANGARH
CHAMPION


नालको NALCO
IPSC
GAIL
OPPO F11


Sports
Tourism India
MAHESHWARI INTERNATIONAL SCHOOL,
KISHANGARH
&
MAHESHWARI INTERNATIONAL SCHOOL,
AJMER
R.C. MAHESWARI MEMORIAL


OPPO F11

Sports
Tourism India

Cerficate of Appointment

This is to certify that

Akeem Mohammed

has been appointed

Co-Ordinator

of Telangana State Sports Tourism India

effect from

1 December 2019

AGHA MUZAFFAR UDDIN
Joint Secretary Sports Tourism India

JYOTI SHUKLA
National Working President
Sports Tourism India

T.C. MAHESHWARI
Chairman
Sports Tourism India

TANVEER DAD
Secretary General
Sports Tourism India

Sports Tourism India

4th Sports Tourism India
National Football Championship 2019

Kishangarh, Ajmer, Rajasthan from 28th to 30th December 2019

Organised by : MAHESHWARI INTERNATIONAL SCHOOL & SPORTS TOURISM INDIA

Sr.No. 004

MERIT CERTIFICATE

This is Certify that Mr. / Miss / Master Mohd Afsan Mari
of Telangana State for Participate as Player / Manager / Referee / Coach / Official
in the 4th Sports Tourism India National Football Championship 2019 held at Kishangarh, Ajmer
(Rajasthan) from 28th to 30th December 2019 Age group - U-14, U-17, U-19. & Open.
Position : WINNER / RUNNER / IInd RUNNER / PARTICIPATION.

Arshad Ali Jafri, Chief Patron, Sports Tourism India
TC. Maheshwari, Chairman, Sports Tourism India
Jyoti Shukla, National Working President, Sports Tourism India
Vijay Singh Martoliya, Vice President, Sports Tourism India
Tanveer Dad Khan, General Secretary, Sports Tourism India

Sports Tourism India

4th Sports Tourism India
National Football Championship 2019

Kishangarh, Ajmer, Rajasthan from 28th to 30th December 2019

Organised by : MAHESHWARI INTERNATIONAL SCHOOL & SPORTS TOURISM INDIA

Sr.No. 003

MERIT CERTIFICATE

This is Certify that Mr. / Miss / Master Mohammed Shahbaaz
of Telangana State for Participate as Player / Manager / Referee / Coach / Official
in the 4th Sports Tourism India National Football Championship 2019 held at Kishangarh, Ajmer
(Rajasthan) from 28th to 30th December 2019 Age group - U-14, U-17, U-19. & Open.
Position : WINNER / RUNNER / IInd RUNNER / PARTICIPATION.

Arshad Ali Jafri, Chief Patron, Sports Tourism India
TC. Maheshwari, Chairman, Sports Tourism India
Jyoti Shukla, National Working President, Sports Tourism India
Vijay Singh Martoliya, Vice President, Sports Tourism India
Tanveer Dad Khan, General Secretary, Sports Tourism India

CRITERIA 5:

FACULTY INFORMATION AND CONTRIBUTIONS TOTAL MARKS 200.00

5 FACULTY INFORMATION AND CONTRIBUTIONS (200)

Name	PAN No.	University Degree	Date of Receiving Degree	Area of Specialization	Research Paper Publications	Ph.D Guidance	Faculty receiving Ph.D during the assessment year	Current Designation	Date (Designated as Prof/Assoc. Prof.).	Initial Date of Joining	Association Type	At present working with the Institution (Yes/No)	In case of NO, Date of Leaving	IS HOD?
Dr. ZAHIR HASAN	ACZPH9953Q	ME/M. Tech and PhD	29/01/2008	STUDIES ON STRENGTH, FRACTURE, FATIGUE AND WEAR Behaviour of AlSiC Particulate Composite	6	02		Professor	-	18/08/2018	Regular	Yes		No
RAZA AHMED KHAN	AUUPK5809M	MS	05/12/2000	HVAC	5			Associate Professor	07/01/2010	07/01/2010	Regular	Yes		No
SYED AMER UR RAHMAN	BUFPR5514J	M.E/M.Tech	04/09/2014	ADVANCED MANUFACTURING SYSTEMS				Assistant Professor		14/11/2014	Regular	Yes		No

SYED SADAT ALI	DUEPS0238F	M.E/M.Tech	03/05/2014	PRODUCTION ENGINEERING	1			Assistant Professor		01/05/2015	Regular	Yes		No
MIRZA HAROON BAIG	BYDPB9603E	M.E/M.Tech	18/10/2014	ADVANCED MANUFACTURING SYSTEMS				Assistant Professor		28/11/2014	Regular	Yes		No
MOHAMMED ABDUL MOYEED	CDDPM5522R	M.E/M.Tech	28/12/2012	CAD/CAM				Associate Professor	02/02/2013	02/02/2013	Regular	Yes		No
MD NASER AHMED	BOLPA9790P	M.E/M.Tech	09/05/2015	MACHINE DESIGN	1			Assistant Professor		01/05/2015	Regular	Yes		No
MD MANSOOR HASSAN	ANDPH4848M	M.E/M.Tech	09/05/2015	PRODUCTION ENGINEERING	1			Assistant Professor		15/04/2015	Regular	Yes		No
SM AZFAR HASHMI	AEIPH1235A	M.E/M.Tech	18/10/2000	PRODUCTION ENGINEERING				Assistant	02/07/2018	02/07/2018	Regular	No	30/10/2020	No
MOHAMMAD UMAIR ANSARI	BCHPA3692J	M.E/M.Tech	14/10/2016	PRODUCTION ENGINEERING				Assistant Professor		10/11/2016	Regular	Yes		No
MOHAMMAD ABRAR HUSSAIN	CGMPM8289D	M.E/M.Tech	07/01/2017	HVAC	2			Assistant Professor		02/01/2017	Regular	No	30/10/2021	No

TASLEEM BANU	CDMPB0981Q	M.E/M.Tech	28/10/2014	CAD/CAM				Assistant Professor		31/10/2014	Regular	Yes		No
VINAY KULKARNI	BYMPK4812M	M.E/M.Tech	09/05/2015	THERMAL POWER ENGINEERING				Assistant Professor		02/07/2018	Regular	No	31/03/2021	No
PRATIMA S JOSHI	BSDPJ9318Q	M.E/M.Tech	30/05/2018	MATERIAL SCIENCE AND TECHNOLOGY				Assistant Professor		02/07/2018	Regular	No	14/08/2021	No
MOHD ABDUL JABBAR	ANMPJ6924B	M.E/M.Tech	29/01/2016	HVAC MECHANICAL ENGINEERING				Assistant Professor		12/02/2016	Regular	Yes		No
RAMULU KARNALA	ALFPK4957L	M.E/M.Tech	10/04/1991	PRODUCTION ENGINEERING				Associate Professor		01/11/2017	Regular	Yes		No
SARTAZ SARTAZ	BFBPS1258B	M.E/M.Tech	31/01/2012	AUTOMATION & ROBOTICS				Associate Professor	12/12/2014	12/12/2014	Regular	No	31/07/2021	No
SYED ZAKIUDDIN	ABKPZ4729L	M.E/M.Tech	18/12/2013	ADVANCED MANUFACTURING SYSTEMS				Assistant Professor		27/12/2013	Regular	No	14/08/2020	No
MOHAMMED TAHER	AKIPT2094B	M.E/M.Tech	18/08/2015	HVAC				Assistant Professor		15/04/2015	Regular	Yes		No
MOHD ISHAQ	AEOPI0285D	M.E/M.Tech	07/01/2017	HVAC				Assistant Professor		12/01/2017	Regular	No	31/10/2018	No
Dr. MOHAMMED NASRULLAH	ACGPN8445G	ME/M. Tech and PhD	17/02/2016	I.C engines				Professor	11/02/2017	11/02/2017	Regular	No	06/07/2020	No
KHAN RAHMAN ABDUL	EVSPK1445J	M.E/M.Tech	10/08/2016	CAD/CAM				Assistant Professor		04/01/2017	Regular	Yes		No
KAUSAR FATIMA	ACZPF1666L	M.E/M.Tech	22/11/2016	CAD CAM				Assistant Professor		17/01/2017	Regular	No	06/11/2021	No
SANGAMESH MUGLI	FBIPS2583A	M.E/M.Tech	05/05/2016	MACHINE DESIGN				Assistant Professor		11/05/2016	Regular	Yes		No
SHAIK MALIK ASIM	BUDPA1948R	M.E/M.Tech	05/05/2016	MACHINE DESIGN				Assistant Professor		24/01/2017	Regular	No	31/07/2020	No

KIRAN KUMAR	BTLPG7874D	M.E/M.Tech	22/06/2016	MECHANICAL				Assistant Professor		24/06/2016	Regular	Yes		No
RAJESH MADUGULA	ABCPD1234D	M.E/M.Tech	03/05/2014	CAD/CAM				Assistant Professor		01/01/2015	Regular	No	14/08/2018	No
Dr. VASANTHA KUMAR CHINNAIYA	AFGPV6836C	ME/M. Tech and PhD	09/01/2017	MECH ENGG				Professor	24/01/2017	24/01/2017	Regular	Yes		No
MD MUSHTAQ AHMED	ARQPA2573D	M.E/M.Tech	09/04/2012	Production Engineering				Assistant Professor		01/03/2016	Regular	Yes		No
Dr. SYED MUJAHED HUSSAINI	BGYPS3507H	ME/M. Tech and PhD	17/07/2015	MANUFACTURING	3			Professor	21/11/2015	21/11/2015	Regular	Yes		Yes
IRFAN KHAN	ADKPI0890B	M.E/M.Tech	24/08/2016	HVAC				Assistant Professor		30/08/2016	Regular	Yes		No
Dr. SHAIK MAGBUL HUSSAIN	BADPS1105G	ME/M. Tech and PhD	28/02/2015	THERMAL				Professor	27/04/2017	27/04/2017	Regular	No	05/09/2020	No
MD AAQIB RAHMAN	BNFPR0752M	M.E/M.Tech	09/07/2015	cad/cam				Assistant Professor		23/07/2015	Regular	No	14/08/2020	No
FAZAL MOHAMMED	COQPM4722P	M.E/M.Tech	09/05/2015	MACHINE DESIGN				Assistant Professor		10/08/2015	Regular	Yes		No
MOHAMMED RAFEEQ	BUAPR1629A	M.E/M.Tech	07/09/2017	THERMAL POWER ENGG				Assistant Professor		02/07/2018	Regular	Yes		No
MOHAMMED AQEEL AHMED	CYRPM5266P	M.E/M.Tech	20/10/2014	MACHINE DESIGN				Assistant Professor		20/10/2014	Regular	Yes		No
SYED SIBGHATULLAH HUSSAINI QUADRI	AASPQ3585G	M.E/M.Tech	17/04/2014	CAD/CAM				Assistant Professor		18/102011	Regular	No	14/08/2020	No
SALMAN SHAH QUADRI	AAHPQ1874D	M.E/M.Tech	05/11/2014	CAD/CAM				Assistant Professor		10/12/2014	Regular	No	13/06/2017	No

KHAJA ALI MOHAMMED	BXHPM1043C	M.E/M.Tech	20/01/2015	HVAC				Assistant Professor		14/07/2018	Regular	No	28/11/2019	No
MOHAMMED UMAIR HAMID	CVOPM2999B	M.E/M.Tech	16/12/2014	CAD/CAM				Assistant Professor		24/08/2015	Regular	No	15/07/2019	No
MOHAMMED MAKHDOOM MOHIUDDIN	BXJPM0907R	M.E/M.Tech	04/07/2016	MACHINE DESIGN				Assistant Professor		28/07/2016	Regular	No	14/08/2020	No
Dr. K M MAHABOOB SHERIFF	AVIPM9931B	ME/M. Tech and PhD	01/03/2013	PRODUCTION ENGG				Professor	14/07/2018	14/07/2018	Regular	No	31/08/2021	No
ALI AHMED	AVHPA3525C	M.E/M.Tech	27/08/2016	THERMAL ENGINEERING				Assistant Professor		01/09/2016	Regular	No	20/06/2019	No
MOHAMMAD KHAJA YOUSUFAYAN	BVXPM4201Q	M.E/M.Tech	01/03/2016	CAD/CAM				Assistant Professor		11/11/2016	Regular	No	29/06/2019	No
MOHAMMED AHMAD HUSSAIN	AEFPH1856Q	M.E/M.Tech	21/11/2016	THERMAL ENGINEERING				Assistant Professor		29/11/2016	Regular	Yes		No
MOHD YOUSUF ALI	BYPPA6037B	M.E/M.Tech	07/06/2016	CAD/CAM				Assistant Professor		24/11/2016	Regular	No	06/11/2020	No
SHAIKH BADESAB SIRAJUL HASSAN	CHUPS2390N	M.E/M.Tech	21/04/2017	THERMAL ENGINEERING				Assistant Professor		04/05/2017	Regular	No	07/08/2021	No
SYED ZAKIR HUSSAIN	AHXPH1732Q	M.E/M.Tech	17/01/2017	HVAC				Assistant Professor		30/01/2017	Regular	No	02/05/2018	No
MD ABDUL HAMED KHAN	CPXPK5412C	M.E/M.Tech	22/03/2016	HVAC				Assistant Professor		06/04/2016	Regular	No	07/08/2021	No
SHARAN KUMAR	FOAPS8327R	M.E/M.Tech	05/05/2016	MACHINE DESIGN				Assistant Professor		16/08/2016	Regular	No	18/06/2018	No
Dr. MOHD ANAZ KHAN	DXDPM3326L	ME/M. Tech and PhD	19/07/2017	MECHANICAL				Professor	26/07/2017	26/07/2017	Regular	No	30/06/2018	No

MOHD MANSOOR HASAN	AMHPH3765L	M.E/M.Tech	19/10/2019	HVAC				Assistant Professor		28/10/2019	Regular	Yes		No
MD TAHER	AQKPT8995M	M.E/M.Tech	06/05/2016	HVAC				Assistant Professor		02/06/2016	Regular	No	20/08/2018	No
MOHAMMED ABDUL SAMAD	CIPPS2074F	M.E/M.Tech	21/03/2014	CAD/CAM				Assistant Professor		24/03/2015	Regular	No	31/07/2021	No
P RAMULU	AUGPP1955D	M.E/M.Tech	18/07/2001	AUTOMATION AND ROBOTICS				Associate Professor	02/07/2019	02/07/2019	Regular	Yes		No
SYED SHAKEEL AHMED	AWDPA3686M	M.E/M.Tech	05/01/2017	CAD/CAM				Assistant Professor		02/07/2018	Regular	Yes		No
MOHD RASHEED	CJIPR8380K	M.E/M.Tech	16/03/2020	HVAC				Assistant Professor		02/03/2020	Regular	Yes		No
SHAIK SHARJEEL ZEESHAN	FOBPS5169J	M.E/M.Tech	18/03/2020	PRODUCTION ENGINEERING				Assistant Professor		02/03/2020	Regular	Yes		No
MOHAMMED SHABBIR AHMED	EIOPM5280A	M.E/M.Tech	18/03/2020	CAD/CAM				Associate Professor		02/03/2003	Regular	Yes		No
Dr. NOOR ALAM	ARKPA2832M	M.E/M.Tech & PhD	18/03/2020	THERMAL ENGINEERING				Associate Professor		02/03/2020	Regular	Yes		No
Mohd khasim	EOMPK2532D	M.E/M.Tech	16/10/2020	HVAC				Assistant Professor		02/03/2020	Regular	Yes		No
Syed Junaid Uddin	AFSPU0326C	M.E/M.Tech	04/10/2021	HVAC				Assistant Professor		11/10/2021	Regular	Yes		No
Rashid Ahmed Siddiqui	DCPPS8793J	M.E/M.Tech	01/05/2021	CAD/CAM				Assistant Professor		06/05/2021	Regular	Yes		No

5.1 Student-Faculty Ratio (20)

UG

No. of UG Programs in the Department 1

BE / B.Tech								
Year of Study	**CAY**		**CAYm1**		**CAYm2**		**CAYm3**	
	(2021-22)		**(2020-21)**		**(2019-20)**		**(2018-19)**	
	Sanction Intake	**Actual admitted through lateral entry students**	**Sanction Intake**	**Actual admitted through lateral entry students**	**Sanction Intake**	**Actual admitted through lateral entry students**	**Sanction Intake**	**Actual admitted through lateral entry students**
2nd Year	60	6	180	18	180	18	**180**	18
3rd **Year**	180	0	180	0	180	0	**180**	0
4th Year	180	0	180	0	180	0	**180**	0
Sub-Total	**420**	**6**	**540**	**18**	**540**	**18**	**540**	18
Total	**426**		**558**		**558**		**558**	
Grand Total	**426**		**558**		**558**		**558**	

PG
No. of PG Programs in the Department 1

	M.Tech			
Year of Study	**CAY (2021-22)**	**CAYm1 (2020-21)**	**CAYm2 (2019-20)**	**CAYm3 (2018-19)**
	Sanction Intake	**Sanction Intake**	**Sanction Intake**	**Sanction Intake**
1st Year	18	18	18	18
2nd Year	18	18	18	18
Total	**36**	**36**	**36**	**36**
Grand Total	**36**	**36**	**36**	**36**

SFR
No. of UG Programs in the Department 1
No. of PG Programs in the Department 1

Description	**CAY (2021-2022)**	**CAYm1 (2020-21)**	**CAYm2 (2019-20)**	**CAYm3 (2018-19)**
Total No. of Students in the Department(S)	**462**	**594**	**594**	**594**
No. of Faculty in the Department(F)	29	**35**	**41**	**40**
Student Faculty Ratio (SFR)	15.93	**16.97**	**14.48**	**14.85**
Average SFR (3 Years)	**SFR=15.79**			
	Total Number of Faculty Members in the Department (excluding first year faculty)			

Note: 75% should be Regular/full time faculty and the remaining shall be Contractual Faculty/Adjust Faculty/Resource persons from industry as per AICTE norms and standards. The contractual faculty will be considered for assessment only if a faculty is drawing a salary as prescribed by the concerned State Government for the contractual faculty in the respective cadre.

5.1.1. Provide the information about the regular and contractual faculty as per the format mentioned below:

	Total number of regular faculty in the department	Total number of contractual faculty in the department
CAY (2021-22)	**29**	**0**
CAYm1 (2020-21)	**35**	**0**
CAYm2 (2019-20)	**41**	**0**
CAYm3 (2018-19)	**40**	**0**

Average SFR for three assessment years: **15.97**
Assessment SFR: **20**

5.2 Faculty Cadre Proportion (25)

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY (2021-22)	3.00	3.00	6.00	6.00	15.00	25.00
CAYm1 (2020-21)	3.00	4.00	6.00	7.00	21.00	29.00
CAYm2(2019-20)	3.00	6.00	6.00	0.00	21.00	40.00
CAYm2(2018-19)	3.00	6.00	6.00	4.00	20.00	35.00
Average Numbers	3.00	5.33	6.00	3.66	20.66	34.66

Cadre Ratio Marks [(AF1 / RF1) + [(AF2 / RF2) * 0.6] + [(AF3 / RF3) * 0.4]] * 12.5: **35.15**

5.3 Faculty Qualification (25)

	X	Y	F	FQ = 2.5 x [(10X + 4Y) / F)]
2021-22 (CAY)	**4**	**30**	**23.1**	**17.31**
2020-21 (CAYm1)	**5**	**35**	**29.7**	**15.99**
2019-20 (CAYm2)	6	40	29.7	18.51
2018-19 (CAYm3)	**6**	**39**	**29.7**	**18.51**

Average Assessment **: 17.27**

5.4 Faculty Retention (25)

Description	CAY (2021-22)	CAYm1 (2020-21)	CAYm2 (2019-20)	CAYm3 (2018-19)
No of Faculty Retained	26	36	40	36
Total No of Faculty	34	40	46	45
% of Faculty Retained	76.4	90	87	80

Average: 85.66%

5.5 Innovations by the Faculty in Teaching and Learning (20)

1. When the fear surprised in the form of COVID-19 pandemic across the globe, we all spent months in confined home, however the faculties produced some excellent, innovative and creative ways to deliver their work in the past year with the help of electronic platforms like, Zoom, MS teams, Google team etc.
2. Method of teaching in our institute is not only limited to the traditional Chalk & Talk methods, but also the use of the modern technology (e.g. power point presentation, audiovisual teaching etc.)
3. The course syllabi are circulated among the students by the subject teacher well before commencement of the class.
4. Faculty also gives the study materials among the students via e-mail, websites, hand-outs etc.
5. The biggest resource for self-learning is obviously the college library. The college library not only has plenty of books to meet the students' syllabus-oriented needs, but it also houses number of books by good national and international authors on a variety of topics which students may regularly access to sharpen and broaden their knowledge. The library also possesses a number of magazines and periodicals related to different branches of science and technology which the students may readily access.
6. Students are made to go through NPTEL lectures, browse different internet sites to increase their knowledge base, about the subject. moreover, through these activities students acquire relevant knowledge which is beyond the syllabus as per the university curriculum.
7. Students are also given various resource materials by the teachers for their self-development and encouragement so as to participate in various competitions of technical innovations, innovative thinking and experimentations.
8. The academic projects of our department organized by the college also serves to create opportunities for students' self-development which is technologically based on extra-syllabus.
9. Management regularly organizes soft skill classes for various departments, based on the availability and requirement, to enhance the students' communication skills, technical grooming, motivation and improve body language thus equip them for the professional world.
10. Management also procured CNC machine for the students to understand the process of working. The CAD lab consist of the current trending software which are job oriented and can be learned by the students to uplift their career.
11. College has setup an Industry Advisory Board with an objective to establish strong industry connects, conduct workshops in collaboration with industry and provide suggestions for process improvement as well as curriculum improvement to build strong brand presence among the industry by consistently interfacing and interacting with the stakeholders.
12. ISHRAE Deccan chapter has been started in the college by approval of core working committee for promoting the quality and standards in mechanical engineering.
13. The college also organizes Orientation programs such as "Entrepreneur and Incubation Engineering" to inculcate new ideas among students.
14. The college has encouraged students to pursue internships during the vacations and acquire necessary problem-solving skills.
15. Parents meet are conducted to take the regular feedback about the progress of their ward and overall development of the college.
16. Cross Functional Learning: In learning process, every student is put through a judicious blend of concepts and practices associated with high tech infrastructure facilities in a dynamic environment. The students are taught through a transformative development experience, intellectual growth, with a deep practical knowledge and sound judgment. The institute pursues innovative pedagogy - Info talk / Induction program / Confabulation talk/ Class room teaching /Extension lecture / Guest lecture / Assignments / presentation / GDs.
17. Tutorials: In tutorial classes, students undertake group discussion, problems faced in lectures room, quiz, class test, work exercise, in supervision of a faculty. These measures improve the knowledge in the subject and appropriate planning of any work for achieving the objective.
18. College to Corporate Sessions: A "College to Corporate" sessions organised for final year students by faculty to prepare them for industries and aware them from corporate culture which includes time management, planning and prioritization, attitude, verbal and nonverbal skills, effective communication skills, group discussion and team building skills, etiquette and interview skills to make them employable.

5.6 Faculty as participants in Faculty development/training activities/STTPs (15)

Name of the faculty	Max 5 Per Faculty			
	2020-21 (CAY)	2019-20 (CAYm1)	2018-19 (CAYm2)	2017-18 (CAYm3)
RAZA AHMED KHAN	3	5	1	1
Dr. ZAHIR HASAN	6	5	1	1
SYED AMER UR RAHMAN	2	3	0	0
SYED SADAT ALI	0	4	0	0
MIRZA HAROON BAIG	0	4	0	0
MOHAMMED ABDUL MOYEED	0	7	2	2
MD NASER AHMED	0	3	0	0
MD MANSOOR HASSAN	0	2	0	0
MOHAMMAD UMAIR ANSARI	0	5	0	0
MOHAMMAD ABRAR HUSSAIN	0	2	0	0
TASLEEM BANU	0	2	0	0
MOHD ABDUL JABBAR	1	2	0	0
RAMULU KARNALA	0	2	0	0
MOHAMMED TAHER	0	9	1	1
DR NOOR ALAM	1	3	0	0
DR.SYED MUJAHED HUSSAINI	1	3	2	2
MOHAMMED SHABBIR AHMED	4	5	0	0
FAZAL MOHAMMED	0	3	0	0
MOHAMMED RAFEEQ	0	3	0	0
MOHAMMED AQEEL AHMED	2	3	0	0
MOHAMMED AHMAD HUSSAIN	6	4	0	0
Mohammed Rasheed	1	0	0	0
Shaik Sharjeel Zeeshan	2	0	0	0
Sum	30	79	7	7

RF = Number of Faculty required to comply with 20:1 Student Faculty Ratio as per 5.1	23.1	29.7	29.7	30.35
Assessment [3*(Sum / 0.5RF)]	7	16	1.4	1.4

Average assessment over 3 years: 8.13

5.7 Research and Development (30)

5.7.1 Academic Research (10)

2020-21

5.7.1.1	**Academic Research:**			SCI/ SCOPUS/Doi link
Sl. No	**Category**	**Details**	**Done by**	
01	Biomass Conversion and Biorefinery	"Tribological evaluation of date seed oil and castor oil blends with halloysite nanotube additives as environment friendlybio-lubricants."	Mohammed Shabbir Ahmed	Ahmed, M.S., Nair, K.P., Tirth, V., Elkhaleefa, A. and Rehan, M., 2021. Tribological evaluation of date seed oil and castor oil blends with halloysite nanotube additives as environment friendlybio-lubricants. Biomass Conversion and Biorefinery, pp.1-10. http://doi.org/10.1007/s13399-021-02020-9 SCI
02	International journal of designing engineering, Submitted on April 2021, Under review	"A Solution for joint pain and other diseases Covid-19 through portable exercise machine"	Dr. Zahir Hasan	Under Review
03	Middle East International Conference on Contemporary Scientific Studies-VI	"Versatility of Aluminium Metal Matrix Composites-A Review"	Dr. Zahir Hasan	September 20-22, 2021
04	National Conference on Innovations and Sustainable Solutions in Engineering and Technology	Impact of COVID-19 Guidelines for HVAC Systems on a Hospital Building	Raza Ahmed Khan	ISBN NO.: 978-93-5457-829-8 , Volume-1, Issue-1, July-2021
05	National Conference on Innovations and Sustainable Solutions in Engineering and Technology	Review on Performance Analysis of a Solid Desiccant Cooling System for Residential Air Conditioning	Raza Ahmed Khan	ISBN NO.: 978-93-5457-829-8 , Volume-1, Issue-1, July-2021
06	National Conference on Innovations and Sustainable Solutions in Engineering and Technology	Fabrication of an Electric Scooter	Raza Ahmed Khan	ISBN NO.: 978-93-5457-829-8, Volume-1, Issue-1, July-2021
07	National Conference on Innovations and Sustainable Solutions in Engineering and Technology	IAQ Assessment in Selected Commercial and Office Buildings in India	Raza Ahmed Khan	ISBN NO.: 978-93-5457-829-8 , Volume-1, Issue-1, July-2021
08	National Conference on Innovations and Sustainable Solutions in Engineering and Technology	Review of Sea Port HVAC System Using MagLev Chiller	Raza Ahmed Khan	ISBN NO.: 978-93-5457-829-8 , Volume-1, Issue-1, July-2021

09	National Conference on Innovations and Sustainable Solutions in Engineering and Technology	Design and Fabrication of Solar Powered Electric Bicycle	Raza Ahmed Khan	ISBN NO.: 978-93-5457-829-8 , Volume-1, Issue-1, July-2021
10	National Conference on Innovations and Sustainable Solutions in Engineering and Technology	REVIEW ON HEAT RECOVERY SYSTEM IN A HOSPITAL BUILDING	Dr. Noor Alam	ISBN NO.: 978-93-5457-829-8 , Volume-1, Issue-1, July-2021
11	National Conference on Innovations and Sustainable Solutions in Engineering and Technology	A Compressor Less Thermoelectric Refrigeration System Powered by Solar Energy	Dr. Noor Alam	ISBN NO.: 978-93-5457-829-8 , Volume-1, Issue-1, July-2021
12	National Conference on Innovations and Sustainable Solutions in Engineering and Technology	A Dual Purpose Exercise for Senior Citizen to cure Joint pain	Dr. Zahir Hasan	ISBN NO.: 978-93-5457-829-8 , Volume-1, Issue-1, July-2021

Old Publications

5.7.1.1	**Academic Research:**		
Sl. No	**Journal**	**Title**	**Author**
1	International Journal of Chemical and Molecular Engineering	World Academy of Science, Engineering and Technology Polyvinyl Alcohol Processed Template Polyniline	S.M. Hussaini
2	ICSOT India: Coastal & Inland Shipping	Analysis of CFRP Flight Interface Brackets Under Random Loads	S.M. Hussaini
3	AIP Conference Proceeding	Failure prediction of CFRP Composites Using Weibull analysis	S.M.Hussaini
4	International Journal of Scientific & Engineering Research	Operational Optimization of Secondary Chilled Water System in a District Cooling	Raza Ahmed Khan
5	International Journal for Research in Applied Science &Engineering Technology	Designing Geothermal Air Conditioning System for a Commercial Application	Raza Ahmed Khan
6	International Journal of Scientific and Engineering Research	Indoor Air Quality Considerations for HVAC Systems Design in India	Raza Ahmed Khan
7	International Journal for Research in Applied Science &Engineering Technology	HVAC Design of Air-Cooled Chiller by Rivet Tool and Power Consumption Analysis when Different Compressors are used for an Office Building	Mohammed Abrar Hussain
8	International Journal for Research in Applied Science &Engineering Technology	Design of HVAC Central Air Conditioning System	Mohammed Abrar Hussain
9	International Journal of Scientific & Engineering Research	HVAC Design and Heat Recovery Options in an Office Building	Raza Ahmed Khan
10	International Journal of Scientific & Engineering Research	Performance Analysis of the HVAC System in a Hospital Building in Hyderabad	Raza Ahmed Khan
11	International Journal of Scientific & Engineering Research	Dynamic Analysis of Suspension System using FE Method	Md Mansoor Hassan, Md Naseer Ahmed, Mohammed Taher & Syed Sadat Ali

12	International Journal of Research and Analytical Reviews (E-ISSN 2348-1269, P- ISSN 2349-5138 IJRAR, Vol.7, Issue 1, pp 314- 322).	Comparative study of various nano-refrigerants for the performance enhancement of VCRS	Zahir Hasan, Mohd Kaleem, Md Azizuddin,& M. Abrar Hussain
13	Materials Today: Proceeding 21 (2020) 153-543 http://doi.org/10.1016/j.matpr.2019.11.083	Investigation of Mechanical and Wear Behavior of Al Based SiC Reinforce metal matrix Composite.	Zahir Hasan, Rakesh Kumar Yadav, and Akhter Husain Ansari
14	Iranian (Iranica) Journal of Energy and Environment 11(4): 292-300.	Performance Enhancement of Vapor Compression Refrigeration System Using CuO Nano Particles in CARE 30 Test Rig	Zahir Hasan, Mohd Kaleem, & Md Azizuddin
15	**Chapter in Book:** Recent Advancesin Mechanical Engineering	Development of Hybrid Nanocomposites by Stir Casting Technique Using Two-Step Mixing	Zahir Hasan, Rakesh Kumar Yadav, and Akhter Husain Ansari
16	**International Journal of Recent Technology and Engineering** (**IJRTE**), Vol. 8, Issue-3, ISSN: 2277-3878, Vol-8 No. 3, pp. 6169-6173	Fabrication and Properties of Aluminum Matrix Hybrid Nanocomposites By Stir Casting Technique.	Zahir Hasan, Rakesh Kumar Yadav, Akhtar Husain Ansari
17	Biomass Conversion and Biorefinery	Evaluation of date seed oil as crop base stock for environmental friendly industrial lubricants	Mohammed Shabbir Ahmed, K. Prabhakaran Nair, Mohammed Sadique Khan
18	Journal Advances in Materials and ProcessingTechnologies, 2020, 6, 2, 233-243 (SCI) (DOI:10.1080/2374068X.2020.1731234	"Predictive study of Inconel718 mechanicalproperties at sub-zero temperatures",	S.M. Hussaini
19	26, 2, 2020, 3090-3093 (DOI:./10.1016/j.matpr.2020.02.639)	"Characterization of Inconel 718 at sub-zero temperatures"	S.M. Hussaini
20	International Journal of Chemical, Molecular, Nuclear, Materials and Metallurgical Engineering, 2017, 11: 60-64 (Scopus).	"Polyvinyl Alcohol processed Templated Polyaniline Films: Preparation, Characterization and Assessment of Tensile Strength"	S.M. Hussaini
21	International Conference on Advanced Materials and Process for Defence Application (ADMAT – 2019), September 23-25, 2019, DMRL, DRDO, Hyderabad, India	"PROCESSING AND CHARACTERIZATION OF ALUMINUM BASED BULK METALLIC GLASSES"	S.M. Hussaini
22	9th International Conference of Materials Processing and Characterization (ICMPC-2019), March 08-10, 2019, GRIET, Hyderabad, India.	"Experimental Characterization of CFRP byNOL Ring Test"	S.M. Hussaini

Books and Patents

Sl. No	Title of the Books	Publisher	Author
1	Development of Zr-based bulk metallic glasses	LAP LAMBERT Academic Publisher, Germany ISBN No: 978-613-9-45905-9	S.M. Hussaini

Sl. No	Title	Patent details	Owner
1	Improvisation In Mechanical Behavior Of Inconel 718 At Subzero Temperature	APPLICATION NUMBER : 202041036195 PUBLICATION DATE (U/S 11A) 11/09/2020	S.M. Hussaini
2	Nano Powder Mixed Vegetable Oil As Dielectric Fluid Coupled With Cryogenically Treated Electrode And Bio Thinner For Enhancement Of Process Performance In Electrical Discharge Machining	APPLICATION NUMBER : 201941029200 PUBLICATION DATE (U/S 11A) 02/08/2019	S.M. Hussaini

5.7.1.2 Details of faculty who are pursuing PhD:

Sl. No	Name of the Faculty	Date of Joining	Year of Registration	Status of work
1	Raza Ahmed Khan	0/07/2010	2011	Registered
2	Mohd Abdul Moyeed	30/01/2013	2016	Registered
3	Mohmmed Shabbir Ahmed	02/03/2020	2013	Registered
4	Aqeel Ahmed	20/10/2014	2021	Registered
5	Sharjeel Zeeshan	02/03/2020	2021	Registered

5.7.2 Sponsored Research (5)

2019-20 (CAYm2)

Project Title	Duration	Funding Agency	Amount
Characterization and metallographic studies of INCONEL 718 when formed and subjected sub-zero temp	1 Year	TEQIP-III, JNTUH	10, 55,000.00
			Total Amount(Y): 1055000.00

Cumulative Amount(X + Y + Z) = 1055000.00

5.7.3 Development Activities (10)

5.7.3.1 Product Development in the Department:

Sl.No	Name of the Faculty	Name of the Students	Name of the Product Developed
1	**Dr Syed Mujahed Hussaini**	1. Mohamed Khader Jilani 2. Mohammed Abdul Rahman 3. Md Waqar 4. Gulam Murtuza	**Solar Powered Floor Cleaning & Metal Detecting Device**
2	**Prof. Raza Ahmed Khan**	1. Mirza Afroz Baig 2. Mirza Amer Baig 3. Mohd Abdul Wasay 4. Mohd Junaid	**Fabrication of Electric Scooter**
3	**Prof. Raza Ahmed Khan**	1. Shaik Abdul Wasay 2. Shaik Ashraf Ali 3. M A Rahman 4. Mohd Sadiq	**Development of Solar E-Bicycle**
4	**Shabbir Ahmed**	1. Md Muheeb Uddin Aslam 2. Md Shahbaz Hussain 3. Md Shaheryar Khan 4. Md Yaser	**Dual Axial Solar Tracking System**

5	**Dr Zahir Hasan**	1. Md Faisal Hussain 2. Md Imran Uddin 3. Md Parvez 4. Salah Mohd	**Portable Exercise Machine**
6	Mohd. Abdul Moyeed	1. Md Adnan Ul Huda 2. MA Tayyab 5. Md Mahboob Khan 3. Naser Bin Ahmed 4. Shaik Aafaq Akram	**3D Printer for ABS components**
7	Md Umair Ansari	1. Md Jameel Ahmed 2. Md Habeebullah Shareef 3. Md Hasan Khan 4. Md Faiz Ahmed	**Fabrication of E Bike**
8	Dr Syed Mujahid Hussain	1. Abdul Mannan 2. Abdul Wajid	**Disinfection Tunnel**
9	Syed Amer Ur Rahman	1. Mujeeb Ahmed 2. Mohammed Abdul Shakeel 3. Mohammed Khaja Nawaz	**GO-KART**
10	Mirza Haroon Baig	1. Nadeem 2. Numan 3. Furkhan 4. Yousuf	**E-BIKE-250**

5.7.3.2 Details of facility available for doing Research in Mechanical department:

S.NO	Name of the Laboratory	Items	Utilization of facilities
1	R & D Lab	CNC MACHINE, Master CAM,	Used for student project work & Faculty research work
2	Simulation Lab	HAP,E-Quest etc	Used for student project work & Faculty research work
3	CAD Lab	AutoCAD, CREO and Ansys etc	Used for student project work & Faculty research work

5.7.3.3 Instructional Materials

S.NO	Instructional Materials	Location /Available at
1	Guidelines	Notice board
2	Vision and mission	In different places of department and Laboratories
3	List of experiments	Laboratory
4	Lab in charge, Lab instructor	Laboratory
5	Do's and Don'ts	Laboratory
6	Course handout for theory and Practical subject	Course file
7	Lab manual	Laboratory
8	Question bank	Course file
9	Study materials as PPT, word documents	Course file
10	Circular	Notice board
11	Time table	Notice board, Class room, Laboratory

5.7.3.4 List of Working Models/ Charts:

S. No.	Name of the Laboratory	Working models/Charts
1	Metallurgy and Material Sciences Lab	Models of Hexagonal Cantered Packed (HCP)
2	Refrigeration & Air Conditioning Lab	Refrigeration Cycles Drawings of HVAC Systems
3	Thermal Engineering Lab	Study Model of Boilers Cut view of Engines
4	Workshop Lab	Charts of Carpentry, Fitting, House-wiring, Tin-Smithy and Plumbing
5	Production Technology Lab	Types of Welded Joints
6	Fluid Mechanics and Hydraulic Machinery	Charts of different Turbine

5.7.4 Consultancy (from Industry) (5)

2019-20 (CAYm1)

Project Title	Duration	Funding Agency	Amount
Design and Development of flexible racks for Supermarket, Hyderabad	1	SAMUH India	100000.00
			Total Amount(X): 100000.00

2018-19 (CAYm2)

Project Title	Duration	Funding Agency	Amount
MACHINE MAINTENANCE	1	PLASTECH ENGINEERING CO.	150000.00
			Total Amount(X): 150000.00

2017-18 (CAYm3)

Project Title	Duration	Funding Agency	Amount
MACHINE MAINTENANCE	1	PLASTECH ENGINEERING CO.	188000.00
			Total Amount(Y): 188000.00

2016-17 (CAYm4)

Cumulative Amount (X + Y + Z) = 4,38,000.00

5.8 Faculty Performance Appraisal and Development System (FPADS) (30)

Faculty Performance Appraisal System The ultimate aim of appraisal of faculty performance is to ensure that the programme objectives are served best. The following methodsare practiced in the college, among other informal ways:

The various assessment processes are designed to achieve the following objectives with respect to faculty:

a. Awareness of the various activities expected to be carried out by them.
b. Awareness of the ideas / parameters involved and methods of assessment
c. To have feedback on their performance in various rolls
d. To become aware of weakness and consciously work on them for improvement
e. To reward faculty who do well and counsel those who fare poorly
f. For teachers to point out improvements required in facilities and other requirements to meet student needs better.
g. To assess the suitability of a teacher for a subject or other curricular/cocurricular activities and to take corrective measures in time.

NAWABSHAH ALAM KHAN COLLEGE OF ENGINEERING & TECHNOLOGY PERFORMANCE APPRAISAL REPORT :

Proforma of faculty appraisal is attached below:

S.No	NAME		PARTICULARS
1	Name of the employee	:	
2	Designation	:	
3	Department	:	
4	Date of birth & age	:	
5	Highest educational qualification	:	
6	Date of joining – i) In the institution	:	
	ii) In the Present Post	:	

S.No	Item Name	Maximum Points	Points Obtained
1	**Academic Performance:**	30	
	Course Pass percentage: 100 % ------ 30		
	90 to < 100% -------25		
	80 to <90%--------20		

	70 to < 80 % ---15		
	60 to < 70 % ---10		
	50 to < 60 %---5		
	%---5 < 50 % -- 0		
	Example:		
	Subject1 : 30		
	Subject2 : 20		
	Average Points : 50/2 : 25		
	No marks for Lab Courses		
2	**Research Publications in Journals/Conferences:**	10	
	1 SCI Indexed Publication/international conferences: 10/ 5 National		
	1 Publication having ISSN/ Confernces reputed : 5/3 National		
	HOD Remarks		
	FDPs attended:		
3	6 Days program : 5	10	**HOD**
	2 to 5 Days Program : 3		
4	**Improvement in Teaching Learning Process:**	20	
	Video lecture, online MOOCs, online notes uploading		
5	**Technical Programs organized (FDP/Workshops)**	10	
6	**HOD recommendation (Ex: Dept. responsibilty,NBA,NAAC coordination etc.)**	20	
		100	
	Principal Remarks		
	PRINCIPAL		

Faculty Performance Appraisal and Development List:

Faculty Promotion list

Table 5.8.1 Faculty Promotion List (2020-2021)

S.NO	Name of the Faculty	Date of Joining	Designation
1	MIRZA HAROON BAIG	28-11-2014	Sr. ASST PROF
2	SYED AMER UR RAHMAN	14-11-2014	Sr. ASST PROF

Table 5.8.2 Faculty Promotion List (2018-2019)

S.NO	Name of the Faculty	Date of Joining	Designation
1	MOHD ABDUL MOYEED	30-01-2013	Sr. ASST PROF
2	ZAKIUDDIN	23-10-2013	Sr. ASST PROF
3	MOHAMMED TAHER	15-04-2013	Sr. ASST PROF

Table 5.8.3 Faculty Promotion list (2017-2018)

S.NO	Name of the Faculty	Date of Joining	Designation
1	SYED SIBGHATULLAH HUSSAINI QUADRI	16-12-2013	Sr. ASST PROF
2	SYED SADAT ALI	1-5-2015	Sr. ASST PROF
3	MD AAQIB RAHMAN	1-11-2013	Sr. ASST PROF

Table 5.8.4 Faculty Award List (2020-2021)

S.NO	Faculty Name	Date of Joining the Institution	Designation	Award
1	DR ZAHIR HASAN	18-08-2018	PROFESSOR	Outstanding Engineering Services to Society Award
2	DR MUJAHED HUSSAINI	21-11-2015	PROFESSOR	Best Researcher Award

Table 5.8.5 Faculty Award List (2018-2019)

S.NO	Faculty Name	Date of Joining the Institution	Designation	Award
1	MOHD ABDUL JABBAR	12-2-2016	ASST PROF	ANNUAL INCREMENT
2	MOHD ABDUL MOYEED	30-01-2013	ASST PROF	ANNUAL INCREMENT

Table 5.8.6 Faculty Award List (2017-2018)

S.NO	Faculty Name	Date of Joining the Institution	Designation	Award
1	MD ABRAR HUSSAIN	2-1-2017	ASST PROF	5000 RUPEES CASH IS AWARDED
2	IRFAN KHAN	11-7-2016	ASST PROF	5000 RUPEES CASH IS AWARDED
3	ALI AHMED	15-2-2016	ASST PROF	5000 RUPEES CASH IS AWARDED

5.9 Visiting/Adjunct/Emeritus Faculty etc. (10)

2019-20

S.No	Adjunct faculty	Expert Area	Visiting date	Subject	No. of hours	No. of days	Net hours
1.	Mr. Mohd hamed Khan	HVAC	8/07/19	Design strategy for commercial HVAC system	02	10	20
2.	Mr. Mohd hamed Khan	HVAC	03/02/20	Design strategy for Industrial HVAC system	03	10	30
							50 Hr.

	5.9.1 Visiting faculty Academic year 2018-2019		
	Name of the Visiting persons	Subject / Topic	Number of classes taken
1	Mr. Syed Moazzam Ali	Energy Conservation and its application	25
2	Mr. Syed Moazzam Ali	Green Building in HVAC Systems	26
	Total Hours		51
3	Mr. Mohd Hamed Khan	Design Strategy for Commercial HVAC Systems	15
4	Mr. Mohd Hamed Khan	Design Strategy for Industrial HVAC Systems	15
	Total Hours		50
	5.9.2 Visiting faculty Academic year2017-2018		
1	Mr. Shaik Abdul Saleem	Computer Integerated Manufacturing and its Application	20
2	Mr. Shaik Abdul Saleem	Computer Integerated Manufacturing and its Code	30
	Total Hours		50
3	Mr. KP Navin Kumar	Turbo Machines and its Advantages in Industries	20

4	Mr. KP Navin Kumar			Velocity Diagram on Kaplan Turbine, Francis Turbine & Pelton Turbine			30
	Total Hours						50

CRITERIA 6:

FACILITIES AND TECHNICAL SUPPORT TOTAL MARKS 80.00

6 FACILITIES AND TECHNICAL SUPPORT (80) Total Marks 80.00

6.1 Adequate and well-equipped laboratories, and technical manpower (30) Total Marks 30.00

S. No	Name of the Laboratory	Number of students per set up (Batch Size)	Name of the important Equipment	Weekly utilization status (all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical Staff	Designation	Qualification
1	Workshop	30	Fitting, Carpentry, Tin Smithy, Foundry, House wiring, Welding, wood turning lathe	24	Mr. Syed Taher, Mr. Rasheed, Mr. Sharfuddin	Technical Staff	ITI
2	Production Technology	30	Arc Welding, Gas Welding, Spot Welding, TIG welding, Flypress, hydraulic press, injection Moulding, Blow Moulding, sand strength test, Metal Casting	12	Mr. Syed Jamal Uddin, Mr Narsing Rao	Technical Staff	ITI
3	Metallurgy and Material Science	30	Microscope, Jominy end Quench Test, Disc polishing Machine, Muffle Furnace, samples(ferrous and non ferrous)	12	Mr. Abdul Bari	Technical Staff	ITI
4	Thermal Engineering Lab	30	Single cylinder 4 stroke diesel engine, Single cylinder Twostroke Petrol engine, Single cylinder electric loading engine, Morse test, Single stage Air Compressor, Two Stage Air Compressor, 2 Stroke petrol Engine port timing, 4 stroke diesel engine valve timing, assembly and disassembly of IC engine.	12	Mr. Abdul Salam	Technical Staff	ITI
5	Metrology and Machine Tools lab	30	Lathe Machine, Drilling Machine, Milling Machine, Shaper,Planer, cylindrical grinder, surface grinding, Tool and Cutter grinder, slotting Machine, bevel protractor, sine bar, tool makers microscope.	12	Mr. Syed Mohd Ali Hussain	Technical Staff	ITI
6	Heat Transfer Lab	30	Forced convection, Natural Convection, Pin fin apparatus, lagged pipe apparatus, Thermal Conductivity Apparatus, transient heat conduction apparatus, Stefan Boltzman apparatus, critical heat flux apparatus, film wise and drop wise condensation apparatus, heat pipe apparatus	12	Mr. Syed Irfan	Technical Staff	ITI
7	CAD/CAM Lab	30	AUTOCAD, ANSYS, CNC Machines	12	Mr. Taher Ali	Technical Staff	B.Tech
8	Refrigeration &	18	Domesticrefrigerator setup, Electrolux refrigerator	6	Mr. Sami Ur	Technical	B.Tech

	Air Conditioning Lab		lab setup, cooling tower setup, window air conditioning system with all measurements and controls.		Rahman	Staff		
9	Dynamics of Machines Lab	30	Gyroscope, Centrifugal Governer, Simple Pendulum, Compound Pendulum, CAM & follower, Simply supported cantilever beam and Dunkerley apparatus.	12	Mr. Abdul Bari	Technical Staff	ITI	

Total Marks 25.00

6.2 Additional facilities created for improving the quality of learning experience in laboratories (25)

Institute Marks : 25.00

Sr. No	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students are expected to have enhanced learning	Relevance to POs/PSOs
1	Seminar Hall	Fully equipped shared seminar hall with Computer, Projector, Student Desk, White Board, Air conditioner, Fan, Cushion chair, Microphone, Speaker, LED	To present technical talk/ project seminars/ research papers/ workshops/ industry interaction presentation. Overall development of students like cultural, sports activities etc.	Per Semester 15 hrs	To bridge the band gap between academic and industry curriculum. To upgrade students to industry standard. Cultural and sports activities.	P05
2	Smart Class Room	Fully equipped shared Smart Class room with LCD projector and software's with the seating capacity of 60	In Smart classes, we use all interactive modules like videos/ presentations and these visually attractive methods of teaching becomes appealing to students who are already struggling with the traditional method of teaching in a classroom. In fact, smart classes are almost like watching videos as sometimes, animated visuals are used to teach a point. This kind of visual is both eye-catching and young students can easily relate	Per Semester 15 hrs	Subjects can be easily analyzed and visualized	P05
3	English Learning language class	The English faculty is deputed to teach basic English for the first year students to make them to understand regular	To increase communication skill	Per semester 30 hrs	Understanding the concepts clearly . To communicate with the faculty for better understanding the subjects.	PO10

		engineering concepts clearly.				
4	Department Library	Having collection of • Text Books, • Reference Books • Journals • Project / seminar report.	To meet the needs of the students To provide reference facilities To refer advanced information for seminar, laboratory, projects To know about the past research activities undertaken by the students	Throughout the semester	all streams of mechanical engineering	P05
5	Videos From NPTEL etc.	Displayed in the smart class rooms.	Understanding the Video oriented Teaching and learning	Throughout the semester	Better Understanding the subject. In depth knowledge beyond syllabus.	PO5
6	Internet & Wi-Fi	Availability of Internet in exclusive lab: yes (as required) • Available in most computing labs: yes"	High speed internet connection to access the internet	Throughout the semester"	Update the knowledge	P05

6.3 Laboratories: Maintenance and overall ambiance (10) Total Marks 10.00

Institute Marks : 10.00

6.3. Laboratories: Maintenance and Overall Ambiance

1. All the laboratories are well maintained with adequate number of instruments/equipment for the students. All the labs have sufficient space for conducting experiments and are properly ventilated and illuminated

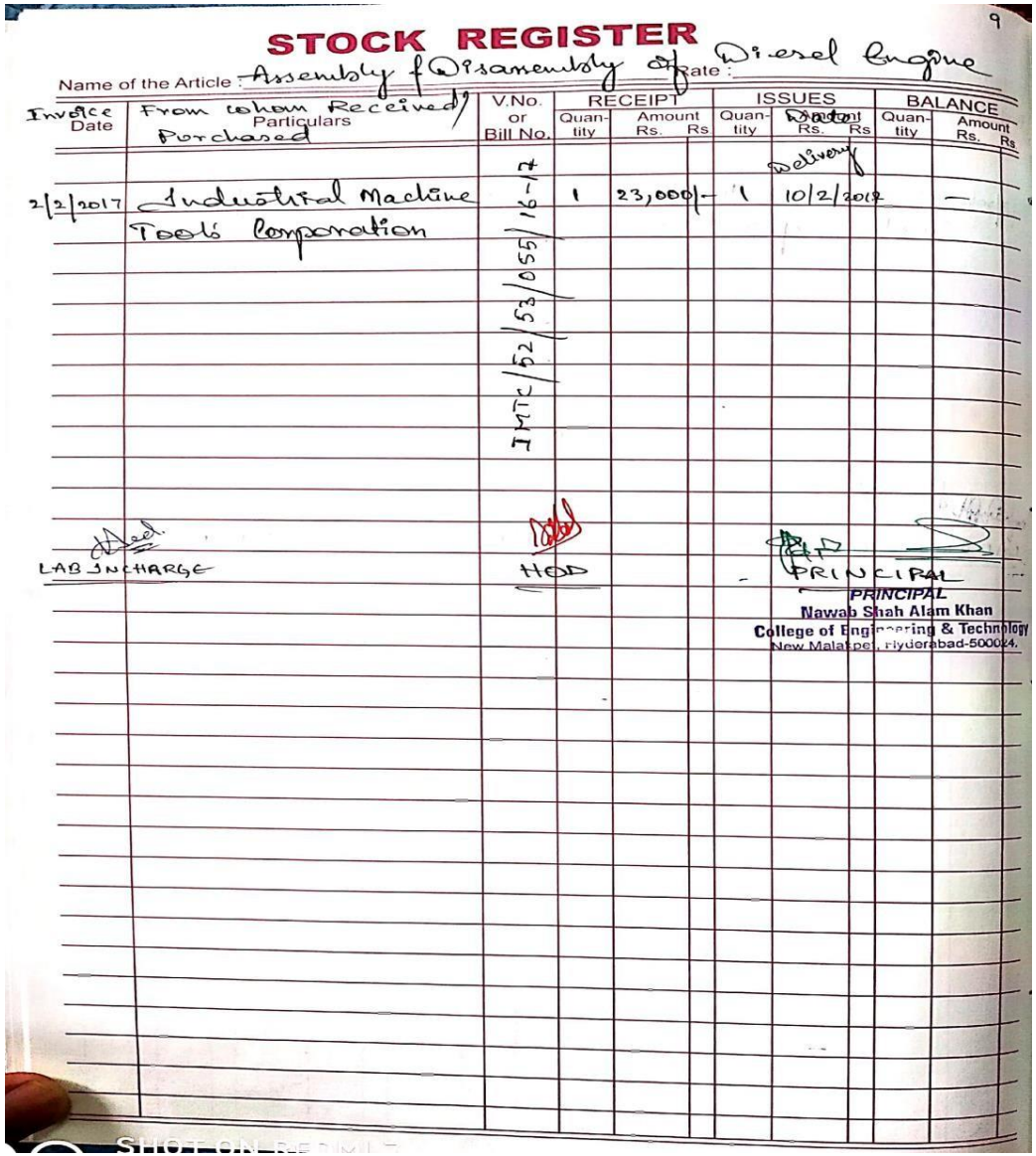
2.lab manuals are available in all the laboratories.

3. Adequate and well experienced technical staffs are available.

4. Servicing of each lab is done frequently.

Ambiance:

1. Sufficient number of windows are available for ventilation and natural light.
2. Lighting system is very effective.
3. Emergency light connections are available in Lab in case of power failure.
4. Each Lab is equipped with white/black board
5. Exclusively project lab has been provided for the students to carry out their mini and major project work



STOCK REGISTER

9

Name of the Article : Assembly of Disassembly of Diesel Engine

Invoice Date	From whom Received / Particulars Purchased	V.No. or Bill No.	RECEIPT Quantity	RECEIPT Amount Rs.	RECEIPT Rs	ISSUES Quantity	ISSUES Date of Delivery	ISSUES Amount Rs.	ISSUES Rs	BALANCE Quantity	BALANCE Amount Rs.	BALANCE Rs
2/2/2017	Industrial Machine Tools Corporation	IMTC/52/53/055/16-17	1	23,000/-		1	10/2/2017			—		

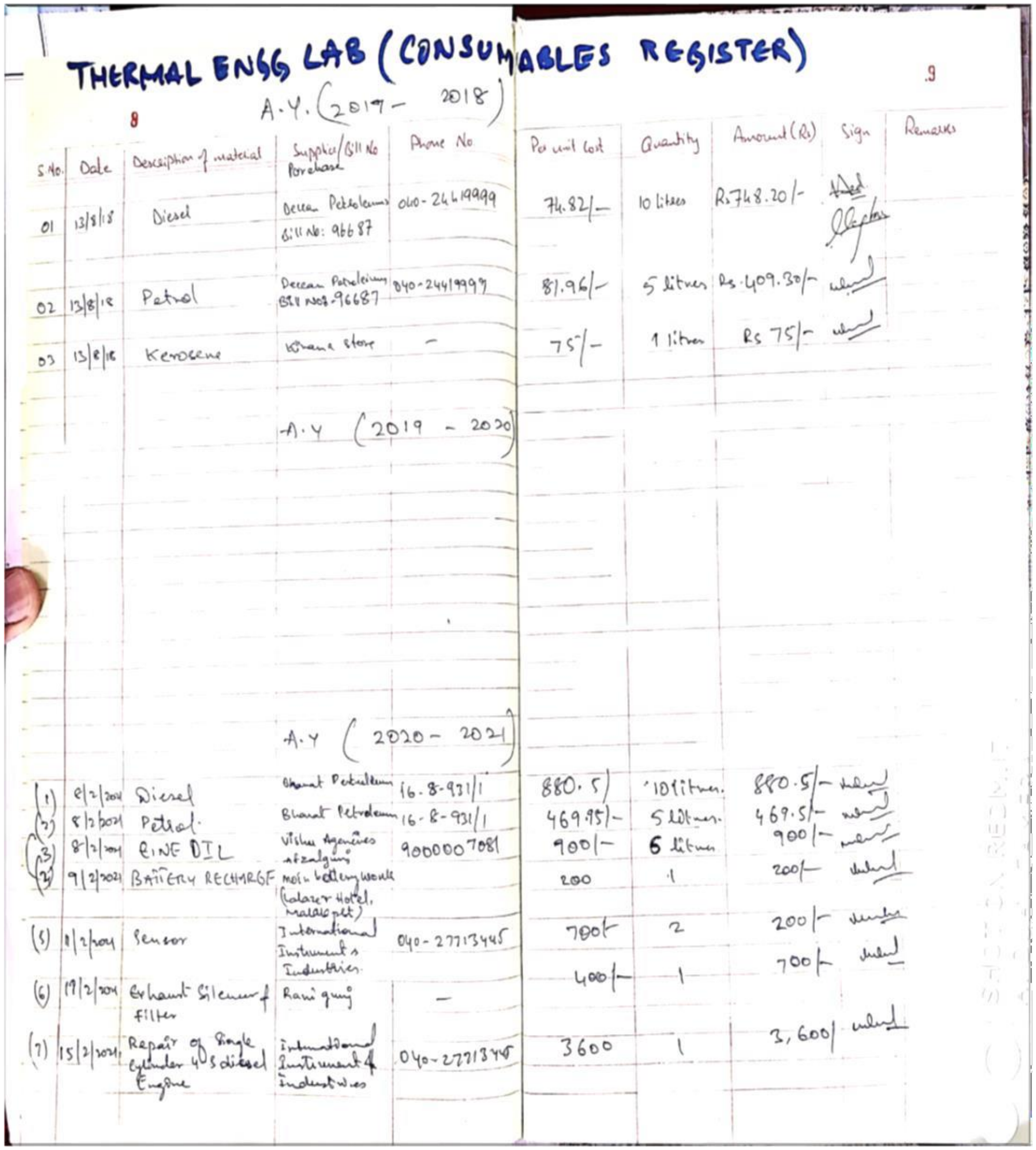
LAB INCHARGE

HOD

PRINCIPAL

PRINCIPAL
Nawab Shah Alam Khan
College of Engineering & Technology
New Malakpet, Hyderabad-500024.

Fig:6.3.1: Sample of Stock register



THERMAL ENGG LAB (CONSUMABLES REGISTER)

8 A.Y. (2017 - 2018) .9

S.No.	Date	Description of material	Supplier/Bill No Purchase	Phone No	Per unit Cost	Quantity	Amount (Rs)	Sign	Remarks
01	13/8/18	Diesel	Deccan Petroleum Bill No: 96687	040-24419999	74.82/-	10 litres	Rs748.20/-	[signature]	
02	13/8/18	Petrol	Deccan Petroleum Bill No: 96687	040-24419999	81.96/-	5 litres	Rs.409.30/-	[signature]	
03	13/8/18	Kerosene	Kirana store	-	75/-	1 litres	Rs 75/-	[signature]	
			A.Y (2019 - 2020)						
			A.Y (2020 - 2021)						
(1)	8/2/2021	Diesel	Bharat Petroleum	16-8-931/1	880.5/	10 litres.	880.5/-	[signature]	
(2)	8/2/2021	Petrol	Bharat Petroleum	16-8-931/1	469.95/-	5 litres.	469.5/-	[signature]	
(3)	8/2/2021	2 INE OIL	Vishnu Agencies afzalgunj	9000007081	900/-	6 litres	900/-	[signature]	
(4)	9/2/2021	BATTERY RECHARGE	Mohin battery works (Galaxy Hotel, Malakpet)		200	1	200/-	[signature]	
(5)	1/2/2021	Sensor	International Instruments Industries	040-27713445	700/-	2	200/-	[signature]	
(6)	19/2/2021	Exhaust Silencer filter	Ranigunj	-	400/-	1	700/-	[signature]	
(7)	15/2/2021	Repair of Single cylinder 4S diesel Engine	International Instruments Industries	040-27713445	3600	1	3,600/	[signature]	

Fig:6.3.2: Sample of consumable register

6.4 Project laboratories (5)

Total Marks 5.00

Institute Marks : 5.00

6.4 Project Laboratories

Available lab facilities are used for students project and research work.

SL. No	Name of the lab	facility
1	Workshop	Fitting, carpentry, welding, house wiring, tin smithy,
2	Production technology lab	Arc Welding, Gas Welding, Spot Welding, TIG welding, Flypress, Hydraulic press, Injection Moulding, BlowMoulding, Metal casting
3	Machine Tools lab	Lathe Machine, Drilling Machine, Milling Machine, Shaper, Planer, cylindrical grinder, surface grinder, Tool and Cutter grinder, slotting Machine
4	Thermal Engineering Lab	Single cylinder 4 stroke diesel engine, Single cylinder Two stroke Petrol engine, Single cylinder electric loading engine, Morse test, Single stage Air Compressor, Two Stage Air Compressor, 2 stroke petrol Engine Port timing, 4 stroke diesel engine valve timing, assemble and disassemble of IC engine
5	Heat Transfer Lab	forced convection, Natural Convection, Pin fin Apparatus, lagged pipe apparatus, Thermal Conductivity Apparatus, transient heat conduction apparatus, Stefan boltzman apparatus, critical heat flux apparatus, film wise and drop wise condensation apparatus, heat pipe apparatus

6	CADD/CAM Lab	Drafting and modeling software, CAD stations i5, Autocad,ANSYS,MATLabSoftware,CNC Machines
7	Refrigeration and Air Conditioning Lab	Domestic refrigerator setup, Electrolux refrigerator lab setup, Cooling tower setup, Window air conditioning system with all measurements and controls,
8	Dynamics of Machines Lab	Gyroscope, Centrifugal Governer, Simple Pendulum, Compound Pendulum, CAM & follower, Simply supported cantilever beam and Dunkerley apparatus.
9	Project lab	Exclusive project lab is available.

6.5 Safety measures in laboratories (10)

Total Marks 10.00

Institute Marks : 10.00

Sr. No	Laboratory Name	Safety Measures
1	WORKSHOP	• Do’s and Don’ts , Safety measures are displayed in each laboratory. • First aid box, Fire extinguisher are kept in laboratory. • Students are instructed to wear lab apron. • Well trained technical supporting staff monitor the labs at all times. • Damaged equipments are identified and serviced at the earliest. • Hand gloves, Safety shoes, Welding goggles should be used in the lab • Loose clothing and jewels etc. are prohibited • All electrical equipment shall be properly grounded
2	PRODUCTION TECHNOLOGY LAB	• Do’s and Don’ts , Safety measures are displayed in each laboratory. • First aid box, Fire extinguisher are kept in laboratory. • Students are instructed to wear lab apron. • Well trained technical supporting staff monitor the labs at all times. • Damaged equipments are identified and serviced at the earliest. • Hand gloves, Safety shoes, Welding goggles should be used in the lab • Loose clothing and jewels etc. are prohibited
3	Metallurgy and	• Do’s and Don’ts , Safety measures are displayed in each laboratory. • First aid box, Fire extinguisher are kept in laboratory. • Students

	Material Science	are instructed to wear lab apron. • Well trained technical supporting staff monitor the labs at all times. • Damaged equipments are identified and serviced at the earliest. • Calibration of lab equipments are regularly done
4	Thermal Engineering Lab	• Do's and Don'ts , Safety measures are displayed in each laboratory. • First aid box, Fire extinguisher are kept in laboratory. • Students are instructed to wear lab apron. • Well trained technical supporting staff monitor the labs at all times. • Damaged equipments are identified and serviced at the earliest. • Calibration of lab equipments are regularly done • Hand gloves, Safety shoes, should be used in the lab • Loose clothing and jewels etc. are prohibited.
5	Metrology and Machine Tools Lab	• Do's and Don'ts , Safety measures are displayed in each laboratory. • First aid box, Fire extinguisher are kept in laboratory. • Students are instructed to wear lab apron. • Well trained technical supporting staff monitor the labs at all times. • Damaged equipments are identified and serviced at the earliest. • Calibration of lab equipments are regularly done
6	Heat Transfer Lab	• Do's and Don'ts , Safety measures are displayed in each laboratory. • First aid box, Fire extinguisher are kept in laboratory. • Students are instructed to wear lab apron. • Well trained technical supporting staff monitor the labs at all times. • Damaged equipments are identified and serviced at the earliest. • Calibration of lab equipments are regularly done
7	CAD/CAM LAB	• Specific safety rules for students are displayed. • All electrical equipment shall be properly grounded • Equipment, appliance and extension cords (junction boxes) must be in good condition and must be routinely dusted. • If any problem arises with system report it to the lab incharge. • students are instructed to save their work in one folder . • For any debugging, virus problems consult the programmer for help. • students are not allowed to insert floppies, CDs and Pen drives without prior Permission of concerned faculty/incharge . • students should turn off the system before leaving.
8	REFRIGERATION AND AIR CONDITIONING LAB	• Do's and Don'ts , Safety measures are displayed in each laboratory. • First aid box, Fire extinguisher are kept in laboratory. • Students are instructed to wear lab apron. • Well trained technical supporting staff monitor the labs at all times. • Damaged equipments are identified and serviced at the earliest. • Calibration of lab equipments are regularly done
9	Dynamics of Machines Lab	Do's and Don'ts , Safety measures are displayed in each laboratory. • First aid box, Fire extinguisher are kept in laboratory. • Studentsare instructed to wear lab apron. • Well trained technical supporting staff monitor the labs at all times. • Damaged equipments are identified and serviced at the earliest. • Calibration of lab equipments are regularly done

CRITERIA 7:

CONTINUOUS IMPROVEMENT **TOTAL MARKS 50.00**

7 CONTINUOUS IMPROVEMENT (50)

Total Marks 50.00

7.1 Actions taken based on the results of evaluation of each of the POs & PSOs (20)

Total Marks 20.00

Institute Marks : 20.00

POs Attainment Levels and Actions for Improvement- (2020-21)

POs	Target Level	Attainment Level	Observations
PO 1: Engineering Knowledge			
PO 1	1..8	1.96	Target Achieved, 26 courses achieved the target level
Action for further improvement: 1. Tutorial classes to explain application of scientific theories in Engineering. 2. Additional classes are being conducted to introduce engineering concepts over science. 3. More problems are given for practice			
PO 2: Problem Analysis			
PO 2	1.8	1.59	Attainment can be improved on the basis of the following observations. Observations: 1. Few lateral entry Students has less orientation in basic of engineering mathematics 2. Students sometimes find it difficult to solve the engineering problems
Action: 1. Additional classes are being conducted to introduce fundamental concepts on Mechanical Engineering. 2. More stress on tutorial classes for problem solving 3. More problems of assignment and the monitoring the same on a regular basis. 4. Students are encouraged to raise questions which are solved in the classes.			
PO 3: Design/development of Solutions			
PO 3	1.8	1.37	Attainment can be improved on the basis of the following observations. Observations: 1. Some students from lateral entry find it difficult to solve the engineering problems mathematically. 2. Lack of adequate knowledge of design and development-oriented problems by lateral entry students
Action: 1. Manufacturing Processes are taught with the help of video presentations (such as NPTEL). 2. Additional classes are being conducted to introduce Mechanical Engineering fundamental. 3. More design-oriented classes are taken in the tutorial classes			
PO 4: Conduct Investigations of Complex Problems			
PO 4	1.8	1.35	Attainment can be improved on the basis of the following observations. Observations: 1. Lack of mind set towards investigation if the problems apparently appear to be difficult for few students. 2. Some students find it difficult to use mathematical tools to solve the complex engineering problems 3. Some students take more time for solving investigative problem.
Action: 1. Additional classes are being conducted to motivate the students to be more analytical and result oriented. 2. More practical session on solving analytical and design			

problems. 3. Conduction of Science Fest and motivating students to prepare/built prototype models			
PO 5: Modern Tool Usage			
PO 5	1.8	1.47	Attainment can be improved on the basis of the following observations. Observations: 1. Use of CADD tools by some students for doing project works as a part of their Degree program. 2. Students were needed to be counseled to use the Design/Analysis tools for better opportunity for placements and/or higher studies
Action: 1. Special classes are being conducted using modern tools. 2. Students were given individual systems to work on software. 3. Use of projector for presentation in class rooms.			
PO 6: The Engineer and Society			
PO 6	1.5	1.55	Target Achieved, 24 courses achieved the target level
Action for further improvement: 1. Emphasis on the management subject 2. Project works on environment and social problems like projects related with bio-gas and bio-diesel			
PO 7: Environment and Sustainability			
PO 7	1.5	1.28	Attainment can be improved on the basis of the following observations. Observations : 1. Students are not properly concerned with the environmental issues. 2. Students lack the understanding that technological development cannot sustain without environmental concern for sustainability
Action: 1. Additional classes are being conducted to introduce Environment and sustainability.			
PO 8: Ethics			
PO 8	1.5	1.15	Attainment can be improved on the basis of the following observations. Observations : 1. Some students tend to ignore ethics in engineering, education and management. 2. Students are not clear about the ethical practices in engineering education.
Action: 1. More stress on the compulsory subjects “Values & Ethics in Engineering”. 2. More examples on practices of ethics are being practiced by students in extra classes.			
PO 9: Individual and Team Work			
PO 9	1.5	1.51	Target Achieved, 16 courses achieved the target level
Action for further improvement: 1. Proper counseling to motivate students to do projects of importance 2. Students are encouraged to collaborate for industry oriented project. 3. Students are asked to give individual demonstration and presentation periodically to show their progress			
PO 10: Communication			
PO 10	1.5	1.39	Attainment can be improved on the basis of the following observations. Observations : 1. Moderate communication skill. 2. Moderate presentation skill
Action: 1. Expert classes on soft skill development 2. Exclusive stress on seminar class 3. Group discussion / debate/ quiz competition at a regular intervals			

PO 11: Project Management and Finance			
PO 11	2.0	1.26	Attainment can be improved on the basis of the following observations. Observations : 1. Few students are having less interest in project management 2. Some students are unaware of the impact of project management in Mechanical Engineering
Action: 1. Special classes on project management 2. Assignments are given on project management			
PO 12: Life-long Learning			
12			Attainment can be improved on the basis of the following observations. Observations : 1. Few students find it difficult to understand concepts for lifelong learning 2. Some students are not aware that learning is a never ending process which needs to be carried out through the concept of subjects taught in their engineering course.
Action: 1. Motiv building			

PSOs Attainment Levels and Actions for Improvement- (2020-21)

PSOs	Target Level	Attainment Level	Observations
PSO 1: Implement new ideas on product design and development with the help of modern computer aided tools, while ensuring best manufacturing practices.			
PSO 1	2.0	1.65	Students will learn basic & fundamentals of engineering and mechanical engineering in specific. • Students will build confidence in solving real life problems in mechanical engineering
Action: a) Students are encouraged to read fundamental research paper. b) Encouraged for discovery / innovation.			
PSO 2: Impart technical knowledge, ethical values and managerial skills to make successful career.			
PSO 2	1.5	1.52	Target Achieved, 19 courses achieved the target level
Action for further improvement: Students are encouraged for specialization.			
PSO 3: Develop innovative attitude, critical thinking and problem solving approach for any domains of mechanical engineering.			
PSO 3	2.0	1.54	• Students can diversify their knowledge domain in different engineering disciplines. • Students can get confidence in solving the problem of multi-disciplinary area

Action: Students are encouraged to know outside world, i.e. other than mechanical subject.

7.2 Academic Audit and actions taken thereof during the period of Assessment (10)

Total Marks 10.00

Institute Marks : 10.00

The purpose of an academic audit is to encourage departments or programs to evaluate their **"education quality processes"** – the key faculty activities required to produce, assure, and regularly improve the quality of teaching and learning.

GUIDELINES

1. One subject expert **(ACADEMIC)** nominated by the Head of Department.

a. Experts should be from Affiliated university and other reputed academic Institutions.

2. Internal test and end semester question papers, and Internal test answer scripts will be audited. Two copies of the academic audit report (in the format provided) have to be submitted to Principal office by HODs.

3. Twelve courses (both question paper and answer scripts) for B.Tech/BE program will be audited on random basis for each program .

4. Each expert will audit ten / twelve subjects; five / six in the morning and five / six in the afternoon. Minimum of three answer scripts (one high score, one average score and one low score) will be audited for each subject.

5. Each expert will be paid Rs 4,000/- (2 × Rs 2,000/-) as sitting fee for two sittings (morning and evening).

6. HODs will be requested to take care of hospitality (guest room, pick up and drop, food, etc.).

7. TA/DA and remuneration will be paid as per the norms.

7.3 Improvement in Placement, Higher Studies and Entrepreneurship (10)

Total Marks 10.00

Institute Marks : 10.00

Item	2020-21	2019-20	2018-19	2017-18	2016-17
Total no of final year students	89	118	93	59	159
Number of students placed in companies or government sector (quality placement)	22	31	30	20	62
Pay Packages	1.5-3.00 LPA	1.5-3.00 LPA	1.5-3.6 LPA	1.5-3.00 LPA	1.2-2.6 LPA
Number of students who opted for higher studies with valid qualifying scores/ranks	8	6	16	9	48
Total number of students turned Entrepreneur of Engineering & Technology	2	5	02	-	02

7.4 Improvement in the quality of students admitted to the program (10)

Total Marks 10.00

Institute Marks : 10.00

Item		2021-22	2020-21	2019-20	2018-19
National Level Entrance Examination NA	No of Students admitted	0	0	0	0
	Opening score/Rank	0	0	0	0
	Closing Score/Rank	0	0	0	0

State /University/Level Entrance Examination / Others EAMCET	No of Students admitted	23	51	79	83
	Opening score/Rank	49387	22165	54485	68446
	Closing Score/Rank	107879	200164	300046	200251
Name of the Entrance Examination for Lateral Entry or Lateral Entry details ECET	No of Students admitted	17	34	38	33
	Opening score/Rank	1046	292	488	2096
	Closing Score/Rank	1286	1690	1860	5513
Average CBSE/Any other board result of admitted students (Physics, Chemistry, & Maths)					

8 FIRST YEAR ACADEMICS (50)

Total Marks 42.57

8.0 Faculty List

S.No	Name	PAN No	Qualification	Area of Specialization	Designation	Date of Joining	Date on which Designated as Professor/Associate Professor	Currently Associated(Y/N)	Nature of Association(regular/Contract/Adjunct)	If contractual mention Full	Date of Leaving (In Case
1	FARHEEN SULTANA	DAIPS7511F	M.Sc	PURE MATHEMATICS	Associate Professor	10-Jan-2009	2-Feb-2014	Yes	Regular		
2	M D OSMAN TOUFIQ	CGPPM7630D	M.Phil	APPLIED MATHEMATICS	Associate Professor	10-Oct-2016	10-Oct-2016	Yes	Regular		
3	KHASIM ALI	AQWPK5922F	M.Sc,PhD	A Study on Surface Instailities in Newtonian and NN FLUIDS	Professor	20-Jul-2017	20-Jul-2017	Yes	Regular		
4	BEGUM IMRANA	ATCPB2619R	M.Sc	PURE MATHEMATICS	Assistant Professor	7-Jan-2015	7-Jan-2015	Yes	Regular		
5	RAHEEMA SULTANA	MCIPS0005F	M.Sc	PURE MATHEMATICS	Assistant Professor	17-Jun-2015	17-Jun-2015	Yes	Regular		
6	RIYAZ QURESHI	AAVPQ1033G	M.sc,B.Ed	MATHEMATICS	Assistant Professor	3-Oct-2020	3-Oct-2020	Yes	Regular		
7	MOHAMMED ASADULLAH	ABLPA4490N	M.Sc, PhD	PHYSICS	Professor	2-Jun-2017	2-Jun-2017	Yes	Regular		
8	SHAIK AMER AHMED	HBMPS8856L	M.Sc	PHYSICS	Assistant Professor	3-Oct-2020	3-Oct-2020	Yes	Regular		
9	V. ARUN KUMAR	ARZPV4100E	M.Sc	PHYSICS	Assistant Professor	3-Oct-2020	3-Oct-2020	Yes	Regular		
10	RAJNIKANTH	BKAPT5106P	M.Sc	PHYSICS	Assistant Professor	3-Oct-2020	3-Oct-2020	Yes	Regular		
11	DR MIR MOAZAM ALI	ACQPM2695B	Msc,Ph.D	CHEMISTRY	Professor	11-Oct-2010	11-Oct-2010	Yes	Regular		
12	WAZIDA BEGAM	BNHPB4320B	M.Sc	ORGANIC CHEMISTRY	Assistant Professor	1-Aug-2011	1-Aug-2011	Yes	Regular		
13	SADIA NAUSHEEN	AGZPN1537G	M.Sc ,B.Ed	ORGANIC CHEMISTRY	Assistant Professor	7-Oct-2013	7-Oct-2013	Yes	Regular		
14	MD JAWEED	APRPJ6036P	M.Sc	CHEMISTRY	Assistant Professor	3-Oct-2020	3-Oct-2020	Yes	Regular		
15	SABIHA KHATOON	CMBPK0479C	MA	MASTER OF ARTS IN ENGLISH	Assistant Professor	25-Aug-2009	25-Aug-2009	Yes	Regular		
16	ASIMA PARVEEN	CBAPP9085M	MA	ENGLISH	Assistant Professor	27-Aug-2014	27-Aug-2014	Yes	Regular		

17	BIJAPUR ARIFA	CJBPB6310E	MA	ENGLISH	Assistant Professor	17-Aug-2015	17-Aug-2015	Yes	Regular		
18	MUMTAZ JAHAN	CFUPJ6541N	M.A,B.Ed	ENGLISH	Assistant Professor	3-Oct-2020	3-Oct-2020	Yes	Regular		
19	ASMA SADIAH	DVWPS3326H	M.A	POLITICAL SCIENCE	Assistant Professor	3-Oct-2020	3-Oct-2020	Yes	Regular		
20	AZEEZA SHAHEEN	EXTPS2866E	MBA	MASTER OF BUSINESS ADMINISTRATION	Assistant Professor	30-Jul-2013	30-Jul-2013	Yes	Regular		
21	NISAR AHMED	AWGPA9273K	MBA	MASTER OF BUSINESS ADMINISTRATION	Associate Professor	7-Apr-2014	4-Jun-2019	Yes	Regular		
22	MOHD ABDULSATTAR	GGPPS9177D	MBA	MASTER OF BUSINESS ADMINISTRATION	Assistant Professor	21-Nov-2014	21-Nov-2014	Yes	Regular		
23	MUJEEBUDDIN	DISPM7737R	MBA	MASTER OF BUSINESS ADMINISTRATION	Assistant Professor	25-Jun-2015	25-Jun-2015	Yes	Regular		
24	QIZER UNNISA	AFEPU2196L	MBA	MASTER OF BUSINESS ADMINISTRATION	Assistant Professor	7-Jul-2015	7-Jul-2015	Yes	Regular		
25	KHAN FASIUDDIN	CIXPK6584J	MBA	MASTER OF BUSINESS ADMINISTRATION	Associate Professor	4-Jul-2016	4-Jul-2016	Yes	Regular		
26	SAMEER MAJEED	BEJPM3945Q	MBA	MASTER OF BUSINESS ADMINISTRATION	Assistant Professor	3-Oct-2020	3-Oct-2020	Yes	Regular		
27	MOHAMMED TOUFEEQ	ARPPT2500E	M.Tech	STRUCTURAL ENGINEERING	Assistant Professor	14-Jul-2016	14-Jul-2016	Yes	Regular		
28	USAMA BIN AL AMOODI	BVAPA2167G	M.Tech	STRUCTURAL ENGINEERING	Assistant Professor	1-Sep-2016	1-Sep-2016	Yes	Regular		
29	RAZA AHMED	AUUPK5809M	MS	HVAC	Assistant Professor	7-Jan-2010	7-Jan-2010	Yes	Regular		
30	MD MUSHTAQ	ARQPA2573D	M.Tech	PRODUCTION ENGINEERING	Assistant Professor	1-Mar-2016	1-Mar-2016	Yes	Regular		
31	RASHID AHMED SIDDIQUI	DCPPS8793J	M.Tech	CAD/CAM	Assistant Professor	06-May-21		Yes	Regular		
32	ZAHOORA ABID	AWSPA0264G	M.Tech	CSE	Assistant Professor	15-Apr-2015	15-Apr-2015	Yes	Regular		
33	AIZAZ SULTANA	DXPPS0919M	M.Tech	CSE	Assistant Professor	12-Nov-2016	12-Nov-2016	Yes	Regular		
34	SYEDA ARSHIA LATEEF	ANTPL0262B	M.Tech	CSE	Assistant Professor	1-Jul-2017	1-Jul-2017	Yes	Regular		
35	UZMA HAROON	BCWPH4275F	M.Tech	COMPUTER SCIENCE	Assistant Professor	12-Mar-2020	12-Mar-2020	Yes	Regular		
36	QAZI MOHAMMED ABDUL BASHEER	EXKPB3072C	M.Tech	IT	Associate Professor	12-Mar-2020	12-Mar-2020	Yes	Regular		
37	FATIMA MOHAMMED	FDWPM4949E	M.E.	EEE	Assistant Professor	1-Mar-2019	1-Mar-2019	Yes	Regular		
38	MAAZ AHMED	EPWPM0663A	M.Tech	EEE	Assistant Professor	2-Jul-2018	2-Jul-2018	Yes	Regular		
39	NASEEB KHATOON	BNNPK9919F	M.E.	EEE	Assistant Professor	29-Sep-2019	29-Sep-2019	Yes	Regular		
40	MD IBRAHIM	DJYPM4701A	M.Tech	EEE/POWER ELECTRONICS & DRIVES	Assistant Professor	3-Oct-2020	3-Oct-2020	Yes	Regular		

8.1 First Year Student-Faculty Ratio (FYSFR) (5) Total Marks 5.00

Institute Marks : 5.00

Please provide First year faculty information considering load for the particular program

YEAR	N	F	(N/F)	*Assessment = (5*20)/ FYSFR) (Limited to Max.5)
	Number Of Students (Approved Intake Strength)	Number of Faculty Members (Considering Fractional Load)	FYSFR	
2021-22(CAY)	600	40	15	6.6
2020-21(CAYm1)	600	40	15	6.6
2019-20(CAYm2)	600	36	16.6	6.02
2018-19(CAYm3)	600	34	17.6	5.68
Average	600	37.5	16.05	6.22

8.2 Qualification of Faculty Teaching First Year Common Courses (5) Total Marks 2.00

Institute Marks: 2.00

Year	x (Number Of Regular Faculty with Ph.D)	y (Number Of Regular Faculty with Post Graduate Qualification)	RF (Number of Faculty Members Required as per SFR of 20:1	Assessment Of Faculty Qualification; [(5x+3y)/RF]
2021-22	**3**	**37**	**30**	**4.2**
2020-21	**3**	**37**	**30**	**4.2**
2019-20	**4**	**32**	**30**	**3.8**
2018-19	**4**	**30**	**30**	**3.6**
Average				**3.95**

Average Assessment: 2.00

8.3 First Year Academic Performance (10)

Total Marks 5.57

Institute Marks: 5.57

Academic Performance	2020-21	2019-20	2018-19	2017-18
Mean of CGPA or mean percentage of all successful students(X)	5.36	4.48	5.00	4.25
Total Number of successful students(Y)	42	72.00	34.00	83.00
Total Number of students appeared in the examination(Z)	42	72.00	59.00	119.00
API [X*(Y/Z)]	5.36	4.48	2.88	2.97

Average API [(AP1+AP2+AP3)/3]: 4.24

Assessment [1.5 * Average API]: 6.36

8.4 Attainment of Course Outcomes of first year courses (10)

Total Marks 10.00

8.4.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is done (5)

Institute Marks: 5.00

Course wise Scheme and Syllabus is provided by the University. We have developed course outcomes using Bloom's taxonomy and consequently assignments, tests, quiz, practical and internal exams and projects are aligned to the COs addressing the same levels of Blooms Taxonomy. Generally 1st unit covers **CO1.** The 2nd unit and first half of 3rd Unit cover **CO2.** The remaining part of 3rd unit covers **CO3,** 4th and 5th unit covers **CO4.**

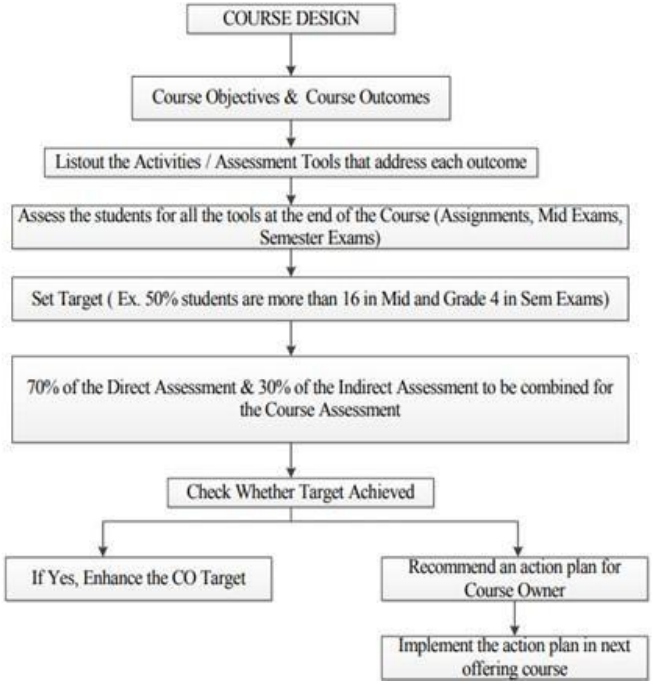
But it may vary from course to course. For evaluation of COs well defined statistical technique is used to map the question with the CO and mapping with the POs and PSOs. Since the question wise results of students from university are not available, analysis of CO with question is limited to internal examinations, assessment of lab practical, assignments, Quiz only.

Direct methods display the student's knowledge and skills from their performance in the continuous internal assessment tests, semester examinations and classroom and laboratory assignments etc. These methods provide a sampling of what students know or can do and provide strong evidence of student learning.

Indirect methods such as surveys will reflect on student's learning. They assess opinions or thoughts about the graduate's knowledge or skills and they are valued by different stakeholders.

2020-2021	Two continous internal Evaluation(CIE) exams for maximum marks of 30 are conducted. Out of 30, 10 marks are awarded for assignments, 20 for the examination covering two course outcomes. Due to covid-19 CIE II was conducted in online mode for first semester and for second semester both CIE-I and CIE-II were conducted in online mode. The final internal marks are achieved by obtaining the average of both CIE exams. The performance of a student in internal assessment with respect to the CO's is recorded. Semester End Examinations (SEE) performance of students for the maximum marks of 70 is considered for external exam performance. The summation of these two performances is considered as cumulative assessment for a prescribed course out come. The laboratory assessment is evaluated for 75 marks. 75 marks are divided into 25 (INTERNAL) and 50 (EXTERNAL).
2019-2020	Two CIE Exams for maximum mark of 30 are conducted. The final internal marks are achieved by obtaining the average of both CIE exams. The performance of a student ininternal assessment with respect to theCO's is recorded. End semester University exam performance of students for the maximum mark of 70 isconsidered for external exam performance. The summation of these two performancesis considered as cumulativeassessment for a prescribed course out come The laboratory assessment is evaluated for 75 marks. 75 marks aredivided into 25 (INTERNAL) and 50 (EXTERNAL)
2018-2019	Two Mid Exams for maximum mark of 25 are conducted. The final internal marks are achieved by obtaining the average of both Mid exams. The performance of a student ininternal assessment with respect to theCO's is recorded. End semester University exam performance of students for the maximum mark of 75 isconsidered for external exam performance. The summation of these two performancesis considered as cumulativeassessment for a prescribed course out come The laboratory assessment is evaluated for 75 marks. 75 marks aredivided into 25 (INTERNAL) and 50 (EXTERNAL)
2017-2018	Two Mid Exams for maximum mark of 25 are conducted. The final internal marks are achieved by obtaining the average of both Mid exams. The performance of a student ininternal assessment with respect to theCO's is recorded. End semester University exam performance of students for the maximum mark of 75 isconsidered for external exam performance. The summation of these two performancesis considered as cumulativeassessment for a prescribed course out come The laboratory assessment is evaluated for 75 marks. 75 marks aredivided into 25 (INTERNAL) and 50 (EXTERNAL)
2016-2017	Two Mid Exams for maximum mark of 25 are conducted. The final internal marks are achieved by obtaining the average of both Mid exams. The performance of a student ininternal assessment with respect to theCO's is recorded. End semester University exam performance of students for the maximum mark of 75 isconsidered for external exam performance. The summation of these two performancesis considered as cumulativeassessment for a prescribed course out come The laboratory assessment is evaluated for 75 marks. 75 marks aredivided into 25(INTERNAL) and 50 (EXTERNAL) The internal assessment 25 is further divided into day to day performance – 10,record – 5 and internal examination-10.

The following figure depicts the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is obtained.



8.4.2 Record the attainment of Course Outcomes of all first year courses (5) Institute
Marks : 5.00

COURSE TITLES: Following are the course titles along with course code used in PO"s

Note: 1. C111, C112 indicative Courses for first year. First numeric digit indicates year of study, second digit indicates the semester and third digit indicates course number.

CAY:2020-21 Courses I Semester Course titles

S. No.	COURSE TITLE	COURSE CODE	SUBJECT CODE
1	MATHEMATICS-I	C101R	BS102MT
2	PHYSICS	C102R	BS104PH
3	BASIC ELECTRICAL ENGINEERING	C107	ES106EE
4	PHYSICS LAB	C111R	BS152CH

5	BASIC ELECTRICAL ENGINEERING LAB	C114	ES154EE
6	ENGINEERING GRAPHICS & DESIGN	C115	ES156CE

CAY: 2020-21 Courses: II Semester Course Titles

S. No.	COURSE TITLE	COURSE CODE	SUBJECT CODE
1	ENGLISH	C204R	HS101EG
2	MATHEMATICS-II	C201R	BS103MT
3	CHEMISTRY	C202R	BS105CH
4	PROGRAMMING FOR PROBLEM SOLVING	C103R	ES107CS
5	ENGLISH LAB	C211	HS151EG
6	CHEMISTRY LAB	C212R	BS153CH
7	PROGRAMMING FOR PROBLEM SOLVING LAB	C112R	ES155CS
8	WORKSHOP/MANUFACTURING PROCESS	C214R	ES157ME

Course attainment for I Year –I Semester Examination: 2020-21

COURSE	ATTAINMENT VALUES
MATHEMATICS-I	0.9
PHYSICS	0.9
BASIC ELECTRICAL ENGINEERING	0.9
PHYSICS LAB	2.25
BASIC ELECTRICAL ENGINEERING LAB	2.25
ENGINEERING GRAPHICS & DESIGN	3.00

Course attainment for I Year - II Semester Examination: 2020 - 2021

COURSE	ATTAINMENT VALUES
ENGLISH	2.925
MATHEMATICS-II	0.9
CHEMISTRY	1.6
PROGRAMMING FOR PROBLEM SOLVING	0.9
ENGLISH LAB	2.25
CHEMISTRY LAB	3
PROGRAMMING FOR PROBLEM SOLVING LAB	2.25
WORKSHOP/MANUFACTURING PROCESS	3

CAYm1:2019-20 Courses I Semester Course titles

S. No.	COURSE NAME	COURSE CODE	SUBJECT CODE
1	MATHEMATICS-I	C101R	BS102MT
2	PHYSICS	C102R	BS104PH
3	BASIC ELECTRICAL ENGINEERING	C107	ES106EE
4	PHYSICS LAB	C111R	BS152CH
5	BASIC ELECTRICAL ENGINEERING LAB	C114	ES154EE
6	ENGINEERING GRAPHICS & DESIGN	C115	ES156CE

CAYm1:2019-20 Courses: II Semester Course Titles

S. No.	COURSE TITLE	COURSE CODE	SUBJECT CODE
1	ENGLISH	C204R	HS101EG

2	MATHEMATICS-II	C201R	BS103MT
3	CHEMISTRY	C202R	BS105CH
4	PROGRAMMING FOR PROBLEM SOLVING	C103R	ES107CS
5	ENGLISH LAB	C211	HS151EG
6	CHEMISTRY LAB	C212R	BS153CH
7	PROGRAMMING FOR PROBLEM SOLVING LAB	C112R	ES155CS
8	WORKSHOP/MANUFACTURING PROCESS	C214R	ES157ME

Course attainment for I Year –I Semester Examination: 2019-20

COURSE	ATTAINMENT VALUES
MATHEMATICS-I	0.825
PHYSICS	0.6
BASIC ELECTRICAL ENGINEERING	0.75
PHYSICS LAB	1.75
BASIC ELECTRICAL ENGINEERING LAB	2.25
ENGINEERING GRAPHICS & DESIGN	3.00

Course attainment for I Year - II Semester Examination: 2019 - 2020

COURSE	ATTAINMENT VALUES
ENGLISH	1.14
MATHEMATICS-II	1.525
CHEMISTRY	1.45
PROGRAMMING FOR PROBLEM SOLVING	1.45

ENGLISH LAB	2.25
CHEMISTRY LAB	2.25
PROGRAMMING FOR PROBLEM SOLVING LAB	2.25
WORKSHOP/MANUFACTURING PROCESS	3.00

Note: 1. C111, C112 indicative Courses for first year. First numeric digit indicates year of study, second digit indicates the semester and third digit indicates course number.

CAYm2: 2018-19 Courses 1 Semester Course titles

S. No.	COURSE NAME	COURSE CODE	SUBJECT CODE
1	Mathematics - I	C111	MA101BS
2	Engineering Physics	C112	PH102BS
3	Programming for Problem Solving	C113	CS103ES
4	Engineering Graphics	C114	ME104ES
5	Engineering Physics Lab	C115	PH105BS
6	Programming for Problem Solving Lab	C116	CS106ES
7	Environmental Science	C117	MC109ES

CAYm2:2018-19 Courses: II Semester Course Titles

S. No.	COURSE NAME	COURSE CODE	SUBJECT CODE
1	Mathematics - II	C121	MA201BS
2	Chemistry	C122	CH202BS
3	Engineering Mechanics	C123	ME203ES
4	Engineering Workshop	C124	ME205ES
5	English	C125	EN205HS
6	Engineering Chemistry Lab	C126	CH206BS
7	English Language and Communication Skills Lab	C127	EN207HS

Course attainment for I Year –I Semester Examination: 2018-19

COURSE	ATTAINMENT VALUES
C111	1.22
C112	1.19
C113	1.22
C114	1.75
C115	2.81
C116	2.76

Course attainment for I Year - II Semester Examination: 2018 - 2019

COURSE	ATTAINMENT VALUES
C121	1.21
C122	1.20
C123	1.71
C124	2.84
C125	2.30
C126	2.84
C127	2.78

NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, OSMANIA UNIVERSITY, Hyderabad

DEPARTMENT OF MECHANICAL ENGINEERING

B.E. I YEAR,III SEM - **ATTAINMENT CALCULATIONS** - Academic Year: **2019-20**

Subject: MATHEMATICS II **Subject Code:** MA103BS **Faculty:** IMRANA BEGUM

S.No.	Hall Ticket No.	CIE - 1											CIE - 2											CIE		SEE
		ASG-1 (5M)	ASG-2 (5 M)	Part-1 Q1-abcd (6 M)		Q 2 (7 M)	Q 3 (7 M)	BEST OF Q2&Q3	Q 4 (7 M)	Q 5 (7 M)	BEST OF Q4&Q5	CIE-1 TOTAL (30 M)	ASG-1 (5M)	ASG-2 (5 M)	Part-1 Q1abcd (6 M)		Q 2 (7 M)	Q 3 (7 M)	BEST OF Q2&Q3	Q 4 (7 M)	Q 5 (7 M)	BEST OF Q4&Q5	CIE-2 TOTAL (30 M)	Average CIE	TOTAL Marks	End Exam
		C01	C02	C01	C02	CO1	CO1	C01	CO2	CO2	C02		C03	C04	C03	C04	CO3	CO3	C03	CO4	CO4	C04		(30 M)	(100 M)	(70 M)
1	161020736001	5	5	3	3	7		7	7		7	30	5	5	3	3	6		6	6		6	28	29	69	40
2	161020736002							0			0	0							0			0	0	0	39	39
3	161020736003	5	4	2	2	2		2	2		2	17	3	4		2	4		4	1		1	14	16	39	24
4	161020736004	5	5	2	3	4		4	4		4	23	5	5	2	2		5	5			0	19	21	39	18
5	161020736005	5	5	2	3		7	6	4		4	26	5	5	3	3	4		4	4		4	24	25	59	34
6	161020736006	5	5	2	3		3	3	6		6	24	5	4	2	2		5	5	4		4	22	23	39	16
7	161020736007	5	5	2	3		3	3	7		7	25	5	4	2	2		5	5	4		4	22	24	39	16
8	161020736008	5	4	2	2	2		2	7		7	22	5	4		2	4		4			0	15	19	39	21
9	161020736009	5	4	2	2			0	2		2	15	3	4		2	4		4	3		3	16	16	39	24
10	161020736010	5	5	2	3		7	7	4		4	26	5	5	3	3	4		4			0	20	23	39	16
11	161020736011	5	5	2	2		6	6	5		5	25	5	5	3	3			0	4		4	20	23	39	17
12	161020736012	4	4	2	2		6	6	5		5	23	4	4		2			0			0	10	17	39	23
13	161020736013	4	4	2	2		5	5		5	5	22	4	4			2		2		2	2	12	17	49	32
14	161020736014	5	5	3	3	6		6	7		7	29	5	5	3	3	5		5	6		6	27	28	49	21
15	161020736015	5	5	3	3		6	6	7		7	29	5	5	3	3	5		5	6		6	27	28	39	11
16	161020736016	5	5	2	2		7	7	4		4	25	5	5	3	3	4		4	7		7	27	26	39	13
17	161020736017	5	4	2	2	2		2	6		6	21	5	5	2	4			0	2		2	18	20	39	20
18	161020736018	5	5	2	3	7		7			0	22	5	5	2		4		4	3		3	19	21	39	19
19	161020736019	5	5	2	2	2		2	6		6	22	5	5	3	3			0	1		1	17	20	39	20
20	161020736020	4	4	2	2		6	6			0	18	5	5					0	5		5	15	17	39	23
21	161020736021	4	5	2	2		7	7			0	20	5	5	3	3			0			0	16	18	39	21
22	161020736022	5	5		3		7	7	7		7	27	5	5	3	3		7	7	4		4	27	27	49	22
23	161020736023	5	5	3	3		6	6	7		7	29	5	5	3	3		7	7	6		6	29	29	79	50
24	161020736024	4	5	2	2		5	5	5		5	23	4	4	3			4	4	4		4	19	21	69	48
25	161020736025	4	4	2	2		5	3			0	17	4	4	3	2		2	2	2		2	17	17	39	22
26	161020736026	5	4	2	2	5		5	4		4	22	4	4				2	2	3		3	13	18	39	22
27	161020736027	4	4	2	2	5		5	4		4	21	5	5				2	2	4		4	16	19	49	31
28	161020736028	5	5	2	2	5		5	4		4	23	5	5	3	2		7	5	3		3	25	24	49	25
29	161020736029	4	5	2	2	4		4		4	4	21	5	3		2			0	2		2	12	17	39	23
30	161020736030	4	4	2	2	4		4		4	4	20	4	4		1		2	2	3		3	14	17	17	0
31	161020736031	5	5	2	2		7	7	7		7	28	5	5	3	3		7	7		7	7	30	29	69	40
32	161020736032	4	4	2	2		5	5	4		4	21	4	4	3				0		3	3	14	18	39	22
33	161020736033	5	5	3	3	7		7		7	7	30	5	5	3	3		7	7		6	6	29	30	99	70
34	161020736034	4	3	3	3	4		4		5	5	22	5	4				2	2			0	11	17	39	23

34	161020736034	4	3	3	3	4		4		5	5	22	5	4				2	2			0	11	17	39	23
35	161020736035	4	4	3	3			0		4	4	18	5	4		3		2	2		4	4	18	18	39	21
36	161020736036	3	3	2	2			0		4	4	14	4	4					0		2	2	10	12	12	0
37	161020736037	5	5	3	3		7	7	7		7	30	5	5	2	3		7	7	6		6	28	29	49	20
38	161020736038	4	5	3	3		7	7	7		7	29	5	4	3	3		6	6		6	6	27	28	49	21
39	161020736039	3	3	2	2			0		5	5	15	4	4					0			0	8	12	39	28
40	161020736040	4	5		3		6	6	6		6	24	5	5	3	3		5	5	2		2	23	24	49	26
41	161020736041	5	5	1	3		5	5	5		5	24	5	5	3	3		5	5	6		6	27	26	49	24
42	161020736042	5	4	1	1		5	5	6		6	22	5	4				2	2	3		3	14	18	49	31
43	161020736043	5	4	2	2		5	5	4		4	22	5	5		3		2	2	5		5	20	21	39	18
44	161020736044	5	5	3	3		5	5	7		7	28	5	5	3	3		5	5		7	7	28	28	59	31
45	161020736045	4	4	2	2	4		4	5		5	21	4	4	3			5	5			0	16	19	39	21
46	161020736046	5	4		3		5	5			0	17	5	5	3			2	2		6	0	21	19	39	20
47	161020736047	5	5	3	3		5	5	4		4	25	5	4			2		2		4	4	15	20	39	19
48	161020736048	5	5	3	3	5		5		4	4	25	4	5				2	2	4		4	15	20	39	19
49	161020736049	5	5	3	3	5		5		4	4	25	4	5			2		2	4		4	15	20	39	19
50	161020736050	4	4	1	1		4	4	3		3	17	4	4		1	1		1		1	1	11	14	14	0
51	161020736051	4	4	2	2		4	4		4	4	20	5	4		3		4	4		5	5	21	21	39	19
52	161020736052	4	4	3	1	4		4	4		4	20	5	5		2		4	4		5	5	21	21	39	19
53	161020736053	4	4	3	3		6	6		7	7	27	5	5	3	3		7	7		6	6	29	28	39	11
54	161020736054	4	3	3	2		4	4		4	4	20	5	5		3		6	6		2	2	21	21	49	29
55	161020736055	4	4	1	1			0		2	2	12	4	3		2		3	3		2	2	14	13	39	26
56	161020736056	5	5	3	3		4	4			0	20	5	5	3	3		4	4	6		6	26	23	39	16
57	161020736057	4	4	3	3		4	4			0	18	5	5	2	2		2	2		2	2	18	18	39	21
58	161020736058							0			0	0							0			0	0	0	0	0
59	161020736059	5	5	3	2		5	5	3		3	23	5	5		3		6	6	4		4	23	23	39	16
60	161020736060	5	5	3	3		4	4		3	3	23	5	5		3		6	6	6		6	25	24	49	25
61	161020736061	5	4	3	3		4	4	4		4	23	5	4					0	2		2	11	17	39	22
62	161020736062	5	4	2	2	3		3	3		3	19	5	5				5	5	2		2	17	18	18	0
63	161020736063	5	5	3	3		6	6		4	4	26	5	4	3	3		2	2	7		7	24	25	49	24
64	161020736064	4	4	3	3		5	5	4		4	23	5	4			2		2	2		2	13	18	39	21
65	161020736065	4	4	3	3	4		4			0	18	5	5		3	3		3		3	3	19	19	49	31
66	161020736066	5	5	3			6	6	6		6	25	4	4				6	6		6	6	20	23	49	27
67	161020736067	5	5		3	6		6		6	6	25	4	4			6		6	6		6	20	23	49	27
68	161020736068	4	4	1	1		3	3	4		4	17	4	4		1			0			0	9	13	39	26
69	161020736069	5	5	2	2	6		6	5		5	25	5	5	2	2		6	6	2		2	22	24	49	26
70	161020736070	5	5	2	2		6	6	5		5	25	5	5	2	2		6	6		2	2	22	24	69	46
71	161020736071	4	5	2	2	4		4			0	17	5	5				4	4		6	6	20	19	49	31
72	161020736072	4	5	3			6	6	2		2	20	5	5				4	4		2	2	16	18	18	0
73	161020736073	4	4	3		4		4	4		4	19	5	5				4	4			0	14	17	17	0
74	161020736074	5	4		3	3		3	6		6	21	5	5			6		6	4		4	20	21	21	0
Average Marks		4.56	4.47	2.33	2.41	4.38	5.34	4.46	4.98	4.47	4.12	21.76	4.71	4.56	2.74	2.57	3.78	4.43	3.41	3.95	4.05	3.26	18.72	20.24	42.31	22.06

CIE (Mid Exam) CO Wise Percentage

COURSE OUTCOME	CO Wise Sum	CO Wise Percentage %		CIE - CO Wise Sum Formula		CIE - CO Wise Percentage

Average Marks	4.56	4.47	2.33	2.41	4.38	5.34	4.46	4.98	4.47	4.12	21.76	4.71	4.56	2.74	2.57	3.78	4.43	3.41	3.95	4.05	3.26	18.72	20.24	42.31	22.06

CIE (Mid Exam) CO Wise Percentage

COURSE OUTCOME	CO Wise Sum	CO Wise Percentage %
CO1	11.34	75.62
CO2	11.00	73.33
CO3	10.86	72.38
CO4	10.39	69.25
Average	10.90	72.64

CIE - CO Wise Sum Formula

C01 = ASG(C01) + Q1(C01) + BestOfQ2&Q3(C01)
C02 = ASG(C02) + Q1(C02) + BestOfQ4&Q5(C02)
C03 = ASG(C03) + Q1(C03) + BestOfQ2&Q3(C03)
C04 = ASG(C04) + Q1(C04) + BestOfQ4&Q5(C04)

CIE - CO Wise Percentage

C01 % = {C01 SUM/total C01 Marks(15)}*100
C02 % = {C02 SUM/total C02 Marks(15)}*100
C03 % = {C03 SUM/total C03 Marks(15)}*100
C04 % = {C04 SUM/total C04 Marks(15)}*100

SEE (End Exam) CO Wise Percentage

C01-C04	22.06	31.52

SEE - CO Wise Percentage

C01-C04 = End Exam Avg Marks

SEE - CO Wise Percentage

C01-C04 % = (End Exam Avg Marks/70)*100

CO ATTAINMENT	Internal Marks X	Internal Attainment	External Marks X	External Attainment	DIRECT ATTAINMENT LEVEL	Indirect Attainment	ATTAINMENT BY LEVEL
CO1	76	3	31.52	0	0.9	3	1.32
CO2	73	3	31.52	0	0.9	3	1.32
CO3	72	3	31.52	0	0.9	3	1.32
CO4	69	2	31.52	0	0.6	3	1.08
Average							1.26

EXTERNAL EXAM / FINAL ATTAINMENT LEVEL SCALE

Attainment Levels	[-]	<=39
	1	40-49
	2	50-59
	3	>=60

INTERNAL EXAM ATTAINMENT LEVEL SCALE

Attainment Levels	[-]	<=49
	1	50-59
	2	60-69
	3	>=70

Direct Attainment %

C01=(C01IntAtn*0.30+C01ExtAtn*0.70)
C02=(C02IntAtn*0.30+C02ExtAtn*0.70)
C03=(C03IntAtn*0.30+C03ExtAtn*0.70)
C04=(C04IntAtn*0.30+C04ExtAtn*0.70)

CO-PO Matrix

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	Attainment
CO1	3	3	1	0	2	0	0	0	0	2	2	2	0	2	3	1.32
CO2	3	2	3	0	0	0	0	0	0	2	1	2	1	2	3	1.32
CO3	3	3	3	1	2	0	1	0	0	0	0	2	1	2	3	1.32
CO4	3	2	2	0	3	0	0	0	0	1	0	1	0	0	3	1.08
Average	3	2.5	2.25	0.25	1.75	0	0.25	0	0	1.25	0.75	1.75	0.5	1.5	3	1.26

Final Attainment %

C01 = (DIRECT ATTAINMENT*0.8) + (INDIRECT ATTAINMENT*0.2)
C02 = (DIRECT ATTAINMENT*0.8) + (INDIRECT ATTAINMENT*0.2)
C03 = (DIRECT ATTAINMENT*0.8) + (INDIRECT ATTAINMENT*0.2)
C04 = (DIRECT ATTAINMENT*0.8) + (INDIRECT ATTAINMENT*0.2)

Course PO Attainments

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Direct Attainment	1.26	1.05	0.945	0.105	0.735	0	0.105	0	0	0.525	0.315	0.735	0.21	0.63	1.26
Indirect Attainment	0.11	0.11	0.11	0.11	0.11	0	0.11	0	0	0.11	0.11	0.11	0.11	0.11	0.11
Final Attainment	1.03	0.862	0.778	0.106	0.61	0	0.106	0	0	0.442	0.274	0.61	0.19	0.526	1.03

PO ATTAINMENTS

DIRECT ATTAINMENT-PO1= {(CO1-PO1)*CO1 ATTAINTMENT}+{(CO2-PO1(2))*CO2 ATTAINTMENT}+{(CO3-PO1)*CO3 ATTAINTMENT}+{(CO4-PO1)*CO4 ATTAINTMENT}
Similar for PO2 TO PO12 & PSO1 TO PSO3
DIRECT ATTAINMENT-PO1 = {(ROW1-PO1)/SUM OF PO1 IN CO-PO MATRIX TABLE}=(30/10
Similar for PO2-PO12 & PSO1 TO PSO3
FINAL ATTAINMENT = (DIR ATNM-PO1)*0.8 + (INDIR ATNM-PO1)*0.2

8.5 Attainment of Program Outcomes from first year courses (20) Total Marks 20.00

8.5.1 Indicate results of evaluation of each relevant PO and/ or PSO, if applicable (15) Institute Marks : 15.00

POs Attainment:

SL NO	Course	SUBJECT	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
1	C101R	MATHEMATICS-I	3.00	2.00	1.00	1.50	1.33	1.75	0.00	0.00	1.00	0.00	0.00	1.50
2	C102R	PHYSICS	2.00	1.00	0.00	1.50	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.50
3	C107	BASIC ELECTRICAL	1.75	1.75	1.25	1.75	1.75	1.50	1.50	1.00	1.75	1.00	1.33	2.50
4	C111R	PHYSICS LAB	1.33	1.50	1.50	1.00	1.50	1.00	2.00	1.50	2.00	1.00	1.00	1.00
5	C114	BASIC ELECTRICAL LAB	1.75	1.75	1.25	1.75	1.75	1.50	1.50	1.00	1.75	1.00	1.33	2.50
6	C115	ENGG GRAPHICS	2.00	1.75	2.00	1.25	2.00	1.50	1.00	0.00	1.00	1.50	1.75	1.75
7	C103R	PROGRAMMING FOR P S	1.50	1.50	2.33	1.00	2.00	2.50	2.25	1.00	0.00	0.00	1.00	1.33
8	C201R	MATHEMATICS-II	3.00	2.50	2.25	1.00	2.33	0.00	1.00	0.00	0.00	1.67	1.50	1.75
9	C202R	CHEMISTRY	1.50	1.50	2.33	1.00	2.00	2.50	2.25	1.00	0.00	0.00	1.00	1.33
10	C204R	ENGLISH	1.67	1.00	1.33	1.33	1.00	1.50	1.25	1.67	1.25	2.25	1.50	1.75
11	C112R	PPS LAB	0.50	0.75	0.50	0.50	1.25	1.25	0.75	1.25	1.50	2.75	0.75	2.00
12	C211	ENGLISH LAB	0.50	0.75	0.50	0.50	1.25	1.25	0.75	1.25	1.50	2.75	0.75	2.00
13	C212R	CHEMISTRY LAB	1.00	1.33	3.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
14	C214R	WORKSHOP LAB	2.75	2.00	1.75	1.75	2.75	2.25	1.50	1.00	2.00	1.50	2.00	2.00

PO Attainment Level

Course	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**
Direct Attainment	2.04	1.61	1.13	1.16	1.09	1.31	1.08	0.84	1.27	1.26	0.90	1.64
CO Attainment	2.04	1.61	1.13	1.16	1.09	1.31	1.08	0.84	1.27	1.26	0.90	1.64

PSOs Attainment:

Course	SUBJECT	PSO1	PSO2	PSO3
C101R	MATHEMATICS-I	1.75	1.00	0.00
C102R	PHYSICS	1.00	1.00	1.00
C107	BASIC ELECTRICAL	1.00	1.00	1.00
C111R	PHYSICS LAB	1.33	1.50	1.00
C114	BASIC ELECTRICAL LAB	1.00	1.00	1.00
C115	ENGG GRAPHICS	1.50	1.50	1.75

C103R	PROGRAMMING FOR P S	1.50	1.00	1.25
C201R	MATHEMATICS-II	1.00	2.00	1.50
C202R	CHEMISTRY	1.50	1.00	1.25
C204R	ENGLISH	1.00	1.50	0.00
C112R	PPS LAB	1.25	0.75	1.50
C211	ENGLISH LAB	1.25	0.75	1.50
C212R	CHEMISTRY LAB	0.00	0.00	0.00
C214R	WORKSHOP LAB	2.50	1.75	1.75

PSO Attainment Level

Course	PSO1	PSO2	PSO3
Direct Attainment	1.22	1.17	0.71
CO Attainment	1.22	1.17	0.71

8.5.2 Actions taken based on the results of evaluation of relevant POs (5) Institute Marks : 5.00

POs Attainment Levels and Actions for Improvement- (2020-21)

POs	Target Level	Attainment Level	Observations
PO 1 : Engineering Knowledge			
PO 1	1.5	2.04	projected target was achieved.
Before the semester basics were explained in induction programme and students are motivated to participate in tech-fest and industrial visits.			
PO 2 : Problem Analysis			
PO 2	1.5	1.61	projected target was achieved.
Analytical and mathematical subjects were taught with more examples and solved more tutorial problems.			
PO 3 : Design/development of Solutions			
PO 3	1.5	1.13	projected target wasn't achieved.
Recent trends in industries were discussed and ICT based teaching were conducted to make simple to understand the subject and solve complex problems.			
PO 4 : Conduct Investigations of Complex Problems			
PO 4	1.5	1.16	projected target wasn't achieved.
1. Students were encouraged to participate in seminars /conferences to develop the knowledge and recent research problems. 2. Guest lecture on data analytics in CLOUD ENVIRONMENT was			
PO 5 : Modern Tool Usage			
PO 5	1.5	1.09	projected target wasn't achieved.

1. Complex topics in subjects are taught by software tools like MATLAB to make simple to understand specified topics. 2. Students are motivated to prepare there projects with software tools to reduce complexity of experiments and model developments.

PO 6 : The Engineer and Society

PO 6	1.5	1.31	projected target wasn't achieved.
Additional classes were conducted for weak students.			

PO 7 : Environment and Sustainability

PO 7	1.5	1.08	projected target wasn't achieved.
1. Economic amd environmental solutions, background based projects were executed for final year. 2. NPTEL video lectures on field related subjects were conducted.			

PO 8 : Ethics

PO 8	1.5	0.84	projected target wasn't achieved.
1. Classes related to professional ethics and gender sensitization were conducted as per plan during the respective periods to enrich ethical moralities and exhibit high degree of professionalism. 2. Personality development classes were conducted by Placement and training cell.			

PO 9 : Individual and Team Work

PO 9	1.5	1.27	projected target wasn't achieved.
1. Industrial visit was organized to Infosys on 31-8-2019. 2. Students are motivated to participate and encouraged to attend the various extra curricular activities. 3.Students are grouped to develop the academic final year and mini projects, the team or group efforts wasmonitored by conducting the reviews.			

PO 10 : Communication

PO 10	1.5	1.26	projected target wasn't achieved.
1. Classes related to communication skills were conducted as per plan during the respective periods. 2. Seminars and projects reviews related to latest engineering topics were conducted in respective subjects. 3. Professional communication in English and English language communication skills lab,subjects were developed in communication skills.			

PO 11 : Project Management and Finance

PO 11	1.5	0.90	projected target wasn't achieved.
1. Motivating the students projects are developed as a team or individual. 2. Motivating the students to develop the product based projects and support the society			

PO 12 : Life-long Learning

PO 12	1.5	1.64	projected target was achieved.
Motivated and conducted awareness classes regarding the higher education,entrance examinations were conducted.			

PSOs Attainment Levels and Actions for Improvement- (2020-21)

PSOs	Target Level	Attainment Level	Observations
PSO 1 : Develop a sound understanding of the concepts and the operational aspects of computer systems.			
PSO 1	1.2	1.22	projected target was achieved.
1.Additional classes to be conducted to introduce data structures concepts. 2.More computer organization to be taught in tutorial classes.			
PSO 2 : Apply ethical software development practices in providing real time solutions using latest development tools.			
PSO 2	1.2	1.17	projected target wasn't achieved.
More problems will be given for practise.			
PSO 3 : Demonstrate their adaptability to the ever evolving societal needs in multidisciplinary fields.			
PSO 3	1.2	0.71	projected target wasn't achieved.
1.Students find it difficult to solve computer organization concepts.			

9 STUDENT SUPPORT SYSTEMS (50) Total Marks 50.00

a. **Mentoring system to help at individual level** (5) Total Marks 5.00

Institute Marks : 5.00

9.1 STUDENTS MENTORING SYSTEM: -

NSAKCET is working towards enhancing the educational culture to better serve the needs of vibrant learning community. Effective mentoring begins with the faculty. When it comes to academic success and persistence, there should be a healthy relationship among faculty members and students thus mentoring system come into picture. An effective Student mentoring system (SMS) has already been implemented in our college. All the students of the college are coming under this system from the date of joining the college.

Number of Faculty Mentors	26
Number of Students per Mentors	20
Frequency of Meeting	Twice per Semester

A batch of 20 students will be allotted to each faculty who will act as a mentor to the students till their graduation. The frequency of meeting is twice in a semester or as and when required. The proctor files are maintained by the faculty which gives the complete academic details of the students. Mentoring includes improving the performance in the course work, student's attendance, encouraging them to attend conferences, workshops, participation in extracurricular activities, career guidance and any other problems faced by the students. A Mentoring File has been distributed to all the respective Mentors of the college. Faculties will have a meeting with the students periodically and their
Academic progress and all his activities are discussed and maintained in the file. Any discrepancies in the student Behavior ,Attendance, Marks etc will be questioned and will be counseled with care. Staff will be submitting the file to the high level Mentoring /Counseling Member like HoD. The HoD will scrutinize case by case and suggest corrective measure.

Description of Mentoring System

S.NO	Type of Mentoring System	Functions
1	Professional Guidance	Motivate Students to expand their knowledge to participate in several Technical Activities.
2	Career Advancement	Encourage Students to participated in Certified courses like CISCO Provide Career guidance & workshops apart from soft-skills training provided by Training & Placement Cell
3	Course Work Specific	Identify Academically slow learner students & provide them with reading material & remedial classes.

4	Laboratory Specific	Encourage students to perform the experiments beyond the curriculum. Support the students to have repetition of Experiments Students are advised to utilized the lab to carryout mini project/project etc.
5	All round development	To Encourage the students to learn Team Work, leadership & motivate them to participate in sports & cultural Activities Encourage and motivate the students to participate in social & environmental cause, NSS, Yoga Day.

The mentoring helped the students in identifying their weakness and aided in improving their technical and non-technical skills. The visible outcome of such counseling was observed in improvement of Marks, Attendance, Behavior, participation in various technical activities like Industrial Visit, Workshops, Seminars and also in extracurricular activities.

Efficiency of Mentoring System :

NSAKCET has Training & Placement Cell that conducts Training and Placement activities**.** The faculty member associated with T&P Cell interact with students and counsel them on higher education and also organize seminars, workshops delivered by experts. Periodically Campus Recruitment Training (CRT) classes are conducted for enhancing their analytical, mathematical and communication skills.

Establishment of the above stated mentoring system has help us in the following ways

1. Enhanced the teaching learning process to be more student centric.
2. Created a positive learning environment.
3. Helped the students learn to take better control of his or her career.
4. Provided impartial advice and encouragement to students.
5. Developed a supportive relationship between students and staff .
6. Assisted with problem solving and Improved self-confidence of students.
7. The CIE Performance and Semester end Exam performance of students has improved.
8. Obtained gradual improvement in attendance percentage of students.
9. Was able to provide individual and personal care to the students with the help of Mentors.
10. Information gathering and dissemination was easy.

9.2 Feedback analysis and reward /corrective measures taken, if any (10)

Total Marks 10.00

Institute Marks : 10.00

A. METHODOLOGY BEING FOLLOWED FOR ANALYSIS OF FEEDBACK AND ITS EFFECTIVENESS:

Firstly observation by making rounds to the department wise classes has been done on the daily basis by the HOD ‘s and principal during classes whether the faculty is on time in the class and on students ,whether they are approaching exact on time and also about the behavior of students and faculty during classes.

Feedback from the students is taken either by online or in written format or by orally about the performance of faculty for all the courses such as the course objectives and outcomes of subject are well defined and making clear to students, whether the class is in discipline during lecture, students getting interest in that respective subjects and so on., with these types of questions feedback has been concerned. Twice in semester, feedback has been taking to evaluate the subject knowledge, teaching skills and all overall performance on parameters in a 5 point scale.

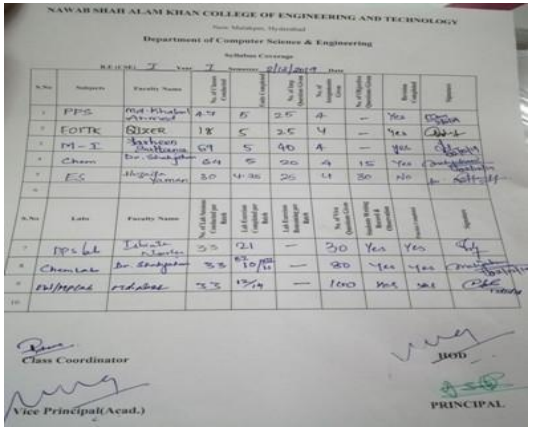
Later, the feedback is analyzed and will be evaluated on a score of 100 and the copy of the feedback is shared to the respective faculty for further necessary corrective actions. Based on the score, the faculty is required to attend the counseling sessions conducted by Head of the Department and Principal.

Class monitoring:

Monitoring is also done through Class Work Review Committees (CWRC) to assess the uniformity in syllabus coverage, and also the quality of teaching. Annual reviews are conducted on detailed self-appraisal forms to evaluate the performance on teaching, research and other performance related parameters. The quality of course material, assignments and question papers prepared by the faculty are assessed internally and suitable suggestions are given.

Percentage of Students who participate:

Students has been given written forms as well as informed in the class to visit the site for online feedback in the class hours. Students having overall attendance of more than 75% can participate to give feedback and 80% of the students in total strength of the class should be present while taking the feedback. The below fig 9.2.1 gives you about the syllabus coverage form sample collected from the students:


NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING AND TECHNOLOGY

Department of Computer Science & Engineering

Class Coordinator

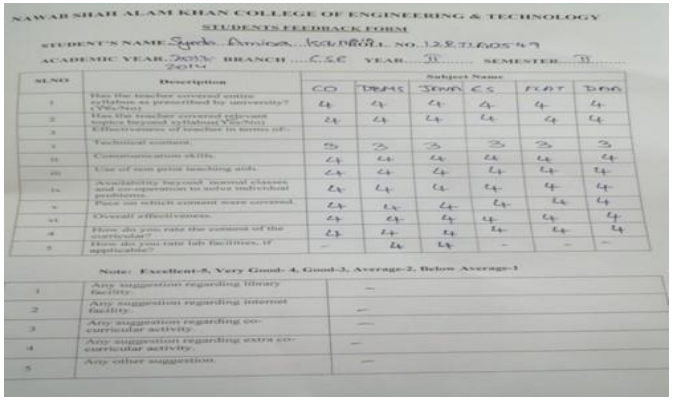
HOD

Vice Principal(Acad.)

PRINCIPAL

Fig: 9.2.1 Syllabus Coverage Form

The below Fig 9.2.2 gives the feedback from the students which show the attributes/indices that will be considered and the rating given by the students: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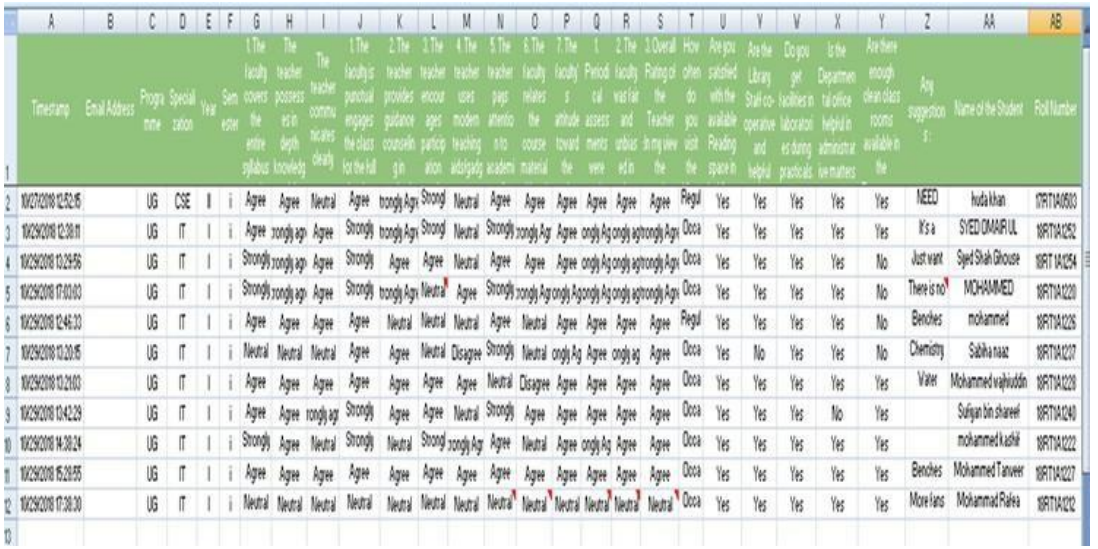
STUDENT'S FEEDBACK FORM

Fig 9.2.2 Feedback

Taken from the Student The below Fig 9.2.3 gives the Online feedback from the students which show the attributes/indices that will be considered and the rating given by the students:



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	Y	V	X	Y	Z	AA	AB
1	Timestamp	Email Address	Programme	Specialisation	Year	Semester	1.The faculty covers the entire syllabus	The teacher possesses in depth knowledg	The teacher communicates clearly	1.The faculty is punctual engages the class for the full	2.The teacher provides guidance counselin g in	3.The teacher encour ages particip ation	4.The teacher uses modern teaching aids/gadg	5.The teacher pays attentio n to academi	6.The faculty relates the course material	7.The faculty s attitude toward the	1. Periodi cal assess ments were	2.The faculty was fair and unbias ed in	3.Overall Rating of the Teacher in my view the	How often do you visit the	Are you satisfied with the available Reading space in	Are the Library Staff co-operative and helpful	Do you get facilities in laboratori es during practicals	Is the Departmen tal office helpful in administrat ive matters	Are there enough clean class rooms available in the	Any suggestion s:	Name of the Student	Roll Number
2	10/27/2018 12:52:45		UG	CSE	II	i	Agree	Agree	Neutral	Agree	trongly Agre	Strongl	Neutral	Agree	Agree	Agree	Agree	Agree	Agree	Regul	Yes	Yes	Yes	Yes	Yes	NEED	huda khan	17IT1A0503
3	10/29/2018 12:28:11		UG	IT	I	i	Agree	rongly agr	Agree	Strongly	trongly Agre	Strongl	Neutral	Strongly	rongly Agr	Agree	ongly Ag	ongly ag	rongly Agre	Occa	Yes	Yes	Yes	Yes	Yes	It's a	SYED OMAIR UL	18RT1A1252
4	10/29/2018 13:29:56		UG	IT	I	i	Strongly	rongly agr	Agree	Strongly	Agree	Agree	Neutral	Agree	Agree	Agree	ongly Ag	ongly ag	rongly Agre	Occa	Yes	Yes	Yes	Yes	No	Just want	Syed Shah Ghouse	18RT1A1254
5	10/29/2018 17:03:03		UG	IT	I	i	Strongly	rongly agr	Agree	Strongly	trongly Agre	Neutral	Agree	Strongly	rongly Agr	ongly Ag	ongly Ag	ongly ag	rongly Agre	Occa	Yes	Yes	Yes	Yes	No	There is no	MOHAMMED	18RT1A1220
6	10/29/2018 12:46:33		UG	IT	I	i	Agree	Agree	Agree	Agree	Neutral	Neutral	Neutral	Agree	Neutral	Agree	Agree	Agree	Agree	Regul	Yes	Yes	Yes	Yes	No	Benches	mohammed	18RT1A1225
7	10/29/2018 13:20:15		UG	IT	I	i	Neutral	Neutral	Neutral	Agree	Agree	Neutral	Disagree	Strongly	Neutral	ongly Ag	Agree	ongly ag	Agree	Occa	Yes	No	Yes	Yes	No	Chemistry	Sabiha naaz	18RT1A1227
8	10/29/2018 13:21:03		UG	IT	I	i	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Neutral	Disagree	Agree	Agree	Agree	Agree	Occa	Yes	Yes	Yes	Yes	Yes	Valer	Mohammed wajhiuddin	18RT1A1228
9	10/29/2018 13:43:29		UG	IT	I	i	Agree	Agree	rongly agr	Strongly	Agree	Agree	Neutral	Strongly	Agree	Agree	Agree	Agree	Agree	Occa	Yes	Yes	Yes	No	Yes		Sufiyan bin shareef	18RT1A1240
10	10/29/2018 14:38:24		UG	IT	I	i	Strongly	Agree	Neutral	Strongly	Neutral	Strongl	rongly Agr	Agree	Neutral	Agree	ongly Ag	Agree	Agree	Occa	Yes	Yes	Yes	Yes	Yes		mohammed kashif	18RT1A1222
11	10/29/2018 15:28:55		UG	IT	I	i	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Occa	Yes	Yes	Yes	Yes	Yes	Benches	Mohammed Tanveer	18RT1A1227
12	10/29/2018 17:26:30		UG	IT	I	i	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Occa	Yes	Yes	Yes	Yes	Yes	More fans	Mohammad Rafeq	18RT1A1212
13																												

Fig: 9.2.3 Online Feed Back Taken From The Students.

B. Corrective Measures Taken:

Based on the figure 9.2.2 and 9.2.3 corrective measures have been taken as, the below Table 9.2.4 gives the details of Rating Indices:

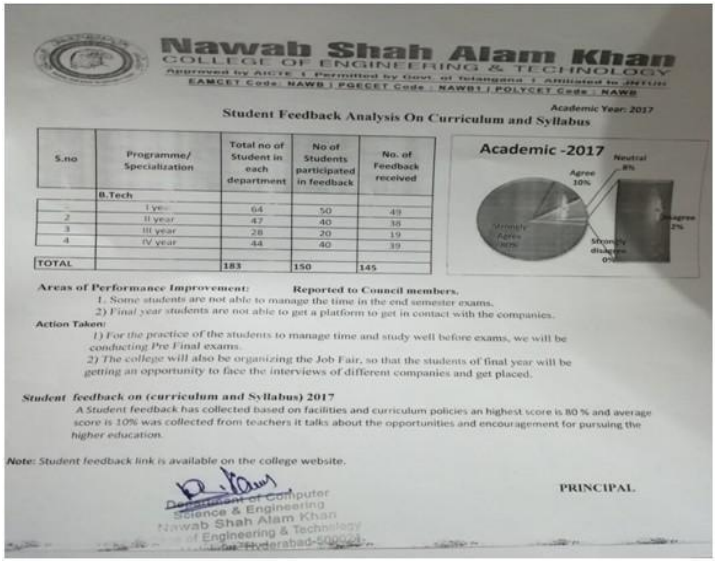
Gradings	Points
Excellent	4.1-5
Good	3.5-4
Average	3-3.5
Below Average	< 3

Table 9.2.4 Rating Indices

Based on the rating received, the necessary steps or action are taken for improvement.

- If the Faculty has rating Ø < 3.5, he/she must submit a written explanation.
- Taking feedback and explanation into consideration, HoD may ask the faculty to Ø improve the performance or he may replace with other faculty.
- The below average performed faculty are trained continuously through **Faculty Development Programme** to improve the subject knowledge and quality of the staff.

The below fig 9.2.5 shows about the corrective actions and student feedback analysis on curriculum and syllabus coverage has been taken with the **staff and student feedback committee members**.



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Student Feedback Analysis On Curriculum and Syllabus

Academic Year: 2017

S.no	Programme/ Specialization	Total no of Student in each department	No of Students participated in feedback	No. of Feedback received
	B.Tech			
1	I year	64	50	49
2	II year	47	40	38
3	III year	28	20	19
4	IV year	44	40	39
TOTAL		183	150	145

Academic -2017

Areas of Performance Improvement: Reported to Council members.
1. Some students are not able to manage the time in the end semester exams.
2) Final year students are not able to get a platform to get in contact with the companies.

Action Taken:
1) For the practice of the students to manage time and study well before exams, we will be conducting Pre Final exams.
2) The college will also be organizing the Job Fair, so that the students of final year will be getting an opportunity to face the interviews of different companies and get placed.

Student feedback on (curriculum and Syllabus) 2017
A Student feedback has collected based on facilities and curriculum policies an highest score is 80 % and average score is 10% was collected from teachers it talks about the opportunities and encouragement for pursuing the higher education.

Note: Student feedback link is available on the college website.

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Fig 9.2.5 Student

9.3 **Feedback on facilities** (5)

Total Marks 5.00

Institute Marks : 5.00

The Institute has a process of collecting the feedback from students every year on various facilities like Infrastructure, Laboratory, Maintenance, Library etc., the feedback forms are collected through suggestion box and analyzed then forwarded to principal office in order to take the corrective measures. The analysis process involves the following steps.

i. The feedback analysis is done manually.
ii. Collected feedback is scrutinized by the feedback committee.
iii. The feedback is quantified.
iv. All the parameters mentioned in the feedback form will be analyzed.
v. After analysis the complaints are forwarded to the principal office in order to take the corrective measures.

Nawab Shah Alam Khan
COLLEGE OF ENGINEERING & TECHNOLOGY

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FEEDBACK COLLECTION FORM ON FACILITIES

Student Regd Number: 18RT1A0399 **Branch:** MECHANICAL **Date:** 27-3-21

Mode	PARAMETER	Need Improvement	Good	Satisfactory	Excellent
LIBRARY	Are the required number of titles in your subject available in the library				✓
	Do you have the facility of Digital Library			✓	
INTERNET	Are you able to access internet center as and when required	✓			
	Are you making use of educational online resources				✓
	Are there enough number of nodes available in the internet center				✓
	Are the net center staff co-Operative and helpful				✓
	Do you have free campus/departmental WI-FI				✓
LAB	Availablity of Equipment	✓			
	Working condition of Equipment				✓
	Staff support in lab				✓
	Fire safety				✓
CLASS ROOM	Size of class room	✓			
	Lighting and ventilation				✓
	Projector				✓
	Smart class with smart board				✓
SPORTS FACILITY	Availability of variety of Sports				✓
	Availabdity of Sports material (ball, bat etc)				✓
	Availability of Outdoor Games				✓
	Conduction of tournaments				✓
CANTEEN	Food price	✓			
	Hygienic food				✓
	Clean place	✓			
	Quantity				✓
	services				✓
INFRASTRUCTURE	Water plant				✓
	Parking				✓
	Toilets		✓		
	Green Campus pedestrian friendly				✓
	Lift/Elevator	✓			
AMINITIES	CCTV Surveillance	✓			
	Security guards				✓
	Waste pit				✓
	Generator				✓

9.4 Self-Learning (5)

Total Marks 5.00

Institute Marks : 5.00

A. Scope for self-learning:

Self –learning is carried in the institute by creating self-learning facilities under various modes. Students are encouraged for learning by personal counseling and organizing various contests.

The curriculum offers courses like self-study, mini-project, major-project where the topic are self selected or based on guide suggestion. The component of self-learning is evaluated in these courses.

A discussion on new technology and its applications in real life that is beyond the syllabus occasionally past year project and working models are made available to students for improvement and innovation. Some of the tasks in the lab courses are challenge based which has to be solved by the students on their own enhancing their skills.

B. Web-based Learning:

The internet is an open information system in which various sources of information, media and materials such as texts, images, video sequences can be linked together to form so called self-learning environment. Internet offers new possibilities to structure, represent, adapt and integrate various learning content and materials.

The institute has internet library to promote and motivate students for self-learning.

C. e-Learning with Multi-media:

- Availability of course material on intra-net

- Digital library facility is available to the students for self-study, projects etc.
- Language lab facility for English communication skills, vocabulary,phonetics etc. LCD projectors for power point presentations.
- NPTEL videos are available in the form of CD for the students to acquire information of the curriculum subjects and beyond curriculum.

D. Google Classrooms:

- The Institution provides Google classrooms, which aim to simplify, creating, distributing, and grading assignments in a paperless way. The primary purpose of Google Classroom is to streamline the process of sharing files between teachers and students.
- Google Classroom makes teaching more productive and meaningful by streamlining assignments, boosting collaboration, and fostering communication. Educators can create classes, distribute assignments, send feedback, and see everything in one place. Classroom also seamlessly integrates with other Google tools like Google Docs and Drive. Each class creates a separate folder in the respective users Drive, where the student can submit work to be graded by a teacher. Teachers can monitor the progress for each student, and after being graded, teachers can return work along with comments.

E. College & Departmental Libraries:

College has a central library and departmental libraries which have specialized collection of books, journals and periodicals for self learning purpose.

F. MOOC (Massive Open Online Course):

A massive open online course is an online course aimed at unlimited participation and open access via the web. In addition to traditional course materials such as filmed lectures, Readings, and problem sets, many MOOCs provide interactive user forums to support community interactions between Students, Professors, and Teaching Assistants. MOOCs are a recent and widely researched development Program.

9.5 **Career Guidance, Training, Placement** (10) Total Marks 10.00

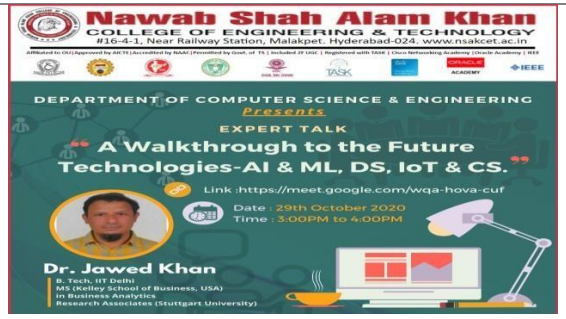
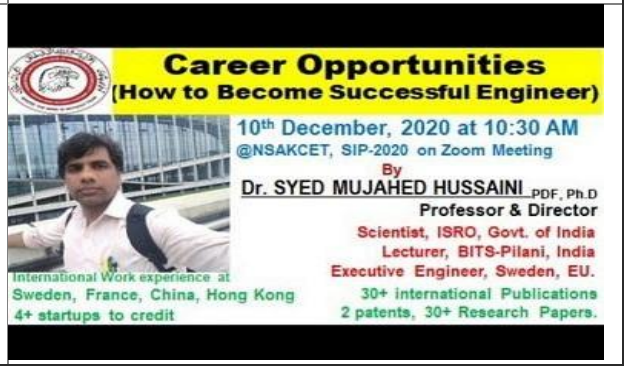
Institute Marks : 10.00

Career Guidance: Effective career guidance services are provided for graduates to discover their strengths and weakness before venturing out into highly competitive world including counseling for higher studies.

The objective of career guidance cell is to organize seminars on interview skills, personality development, communication skills, leadership skills, resume writing, analytical skills, Quantitative ability,Verbal and reasoning skills essential to all competitive exams.

Activities for career guidance cell:

- The Placement& Training Cell liaises with TASK to provide training in soft skills, personality development,Presentation skills, Group discussions, Aptitude and facing the interview board. The cell, after constant interaction with industries, gives feedback on the value-added courses to be offered for various branches of Engineering.
- The Placement Cell arranges for Campus Recruitment by leading Companies through continuousIndustry Institute Interaction, Company visits and excellent Partnerships. Coordinates with Industries for enhancing employability through intense Training in appropriate skills
- Students are referred to different Companies as well, for undergoing In-plant Training, Internships and for acquiring Practical Knowledgethrough exposure to industry environment; e.g. CISCO, Imaraat construction, Infosys, Golconda textiles etc. The Cell motivates and counsels the students to realize their potential.

Guest lecture by **Dr. Syed Mujahed Hussaini**, about **"CAREER PLANNING: What after B.Tech"** on27-December-2016.	
Guest lecture by **Mr. K. VISHWAPRASAD and Mr. D.HEMASUNDER**, about **"CareerOpportunities andFuture Prospects"** on 22- December-2019.	
Webinar by BN.SURESH, CHANCELLOR, IIT drem on "C**hallenges & career opportunities in mecheering" ON 5.08.2020**	
Webinar by **JAWED KHAN IIT, ALUMNI rtunities in AI&ML, DS, IOT&DS" on 29.10.2020**	
Webinar by Dr.S.M HUSSAINI on "**Employmentbility for engineers" on 10.12.2020**	

The career guidance Cell promotes the interests of students who wish to pursue higher education after their undergraduate studies.

- The Cell conducts programs to: Create an interest in higher education as a necessity to meet career aspirations that a student can potentially achieve
- Make the students realize the prospect of higher studies and guide them to identify their area of interest, course, college and
- university within India and abroad Provide students with up-to-date information about their career growth and kindle their interest towards

  investing in hard work, optimum use of time and financial resources to shape their future

  Provide guidance to prepare and approach such examinations confidently.

Placement & Training Cell -Facilities:

- The Placement and Training Cell is functioning under the leadership
- of a Placement Officer and Department Coordinators. Well Equipped Placement Cell.
- Facilities to conduct interviews/ GD's
- Well established computer facilities for aptitude and online tests
- It provides training for various personality development skills, soft skills, communication skills, presentation skills.

Members in Placement Committee

S.No	Name	Designation	Role
1	**Dr. SYED ABDUL SATTAR, PRINCIPAL**	Chairman	1. To promote career counselling by organising guidance lectures by seniorcorporate personnel. 2. To establish active communication with theindustries. 3. To conduct awareness seminars for the preparation ofcampus placement. 4. To coordinate campusplacement procedures.
2	**Mr. MAHESH SINGH BHATIA**	Convener	
3	**Mr. MOHAMMED RAFI , CIVILDEPT**	Member	
4	**Mr. MOHAMMED KHALEEL AHMED, CSE DEPT**	Member	
5	**Mr. MOHAMMED ANWARUDDIN, ECE DEPT**	Member	
6	**Mr. SADDAM, EEEDEPT**	Member	
7	**Mr. MOHAMMED AYAZUDDIN,IT DEPT**	Member	
8	**Mr. SAADATH, MECH DEPT**	Member	

In- house training:

S.NO	Date	Name of the program	Aim of the program	Modules	No. of days/hours
1.	22.02.2016	Technical training	To prepare students on technical skills for campus drive	SE,JAVA, DOT NET, PHP	1 day
2.	11.08.2016	Personal counseling session	To enhance Soft skills	Reasoning, verbal, quantitative, communication skills & personality development	Every second saturday
3.	26.09.2016	Training by TASK	To prepare for interview	Presentation skills, GD, soft skills	4 days
4.	15.03.2017	Career counseling by free lancer		To guide the students for future endeavour	1 day
5	11.10.2017	Work shop on job readiness by global	To prepare for interview skills	personality development, interview skills	1 day

		talent track			
6.	**13.01.2018**	**Path creators**	**Introducing youngsters to corporate culture**	**Developing the youth leardership potential byinteracting**	**1 day**
7.	**22.02.2018**	**Training on c& data structures**	**To prepare students on technical skills for campus drive**	**C& data structures**	**1 day**
8.	**9.12.2018**	**Mock interview**	**How to crack interview in companies**	**Interview skills**	**1day**
9.	**03.03.2019**	**Orientation session by IAEC**	**Career counseling & providing authentic guidance to Indian students for seeking higher education overseas**	**1. What is IELTS? 2. Benfits of IELTS 3. Online resources for IELTS**	**3 hours**
10.	**10.08.2019**	**Edu quotient training india pvt ltd**	**To enhance aptitude & soft skills**	**Reasoning, verbal, quantitative, communication skills & personality development**	**60 hours**
11.	**26.08.2020**	**Quizine – A platter of Quizzes**	**To enhance technical skills**	**Python programming**	
12.	**08.09.2020**	**Reflechir**	**To enhance technical skills**	**Signals and system**	
13.	**20.09.2020**	**Quest**	**To prepare for higher education**	**Mock test (PGCET)**	
14.	**06.10.2020**	**Training for govt. exams**	**To prepare for govt exams**	**Mock test (BSNL,MTNL,RRB)**	

Intensive Training:

Intensive in-house training will be given to the IV Year students for a period of 40 days immediately after their Sixth Semester exams are completed i.e., during their summer vacation. Training will be given in Aptitude, Technical as well as English Communication Skills and Soft skills. Besides training, mock online (both Internet and Intranet based) assessments will be conducted on a regular basis in our own.

The college is associated with various training partners like cisco networking academy, Telangana Academy for skills and knowledge, global track talent are some of the training and placement activities. Some of the MOU's are mentioned for reference:

CISCO networking academy:

Cisco Networking Academy at Nawab Shah Alam Khan College of Engineering and Technology Campus

CISCO Academy provides training for computer hardware and networking for the students. It provides training for soft skills and technical skills for the students under the leadership of an instructor.

Deccan textiles:

Hyderabad Deccan factory:

Global talent track:

Activity based Grammar teaching:

Intricacies of grammar are made easy by encouraging activity based communication among the students.

Self-Introduction	Story Ending
Listing, Scripting and Enacting	Stepping Into Others Shoes
Business Trip to Queristan	Mock Parliament
Loud Conversations	Mock Press
Battle of Words	Quiz on Vocabulary

Presentation Skills

• Group Discussion
• Mock Interviews
• Conversations
• Declamations
Role-plays

Writing Skills:

Email Writing	Resume
• Picture Description	• Creative Writing
• Picture Interpretation	• Connecting the Hints
• Story Interpretation	
• Proverb Expansion	

Reading Skills:

• Loud Reading with Stress and Intonation
• Reading Comprehension

Quantitative Aptitude Topics :

• Percentages	• Ratio and Proportion
• Time & Work	• Problems on Trains

• Profit and Loss	• Problems on Ages
• Pipes & Cisterns	• L.C.M & H.C.F
• Clocks	

Reasoning:

• Number Series Directions •	• Word Analogy & Classification Coded • Inequalities
• Number • Analogy Seating Arrangements	• Coding and Decoding Data • Sufficiency
Number Classification Blood Relations	Problems based on Alphabets Number Puzzles
Letter Series Analytical Reasoning	Number Ranking Odd man Out
• Letter Analogy & Classification • Logical Statements and Conclusions	• Word Analogy & Classification Coded • Inequalities

DEPARTMENT WISE PLACEMENT

Department	2020-2021	2019-2020	2018-2019	2018-2017	2016-2017
CIVIL	27	36	25	30	70
MECH	32	32	30	20	62
CSE	31	14	10	18	30
IT	21	10	5	1	6
TOTAL	111	92	65	69`	171

YEAR WISE PLACEMENT

YEAR	NO. OF STUDENTS
2020-21	111
2019-20	92
2018-19	65
2017-18	69
2016-17	171

Placement drive & training conducted at NSAKCET:

Campus pool drive conducted on 16th feb 2018 atNSAKCET.	
Campus pool drive conducted on 16th feb 2018 atNSAKCET.	
Training program organized by TASK	
Career counseling session	

Aptitude training	
Presentation skills	

9.6 **Entrepreneurship Cell** (5)

Total Marks 5.00

Institute Marks : 5.00

QUESTION:

The institution may describe the facility, its management and its effectiveness in encouraging entrepreneurship and incubation. Success stories for each of these years are to be mentioned.

ANSWER:

Entrepreneurship is increasingly recognized as an important driver of economic growth of a country. Even Govt. of India has recognized the importance of it. Entrepreneurship cell helps the students in identifying entrepreneurial opportunities by conducting surveys and business opportunities.

Functions of the Cell:

To invite renowned guests from small and large scale industries and organize orientation lectures. To visit nearby localities and promote entrepreneurial education to the students. Students are encouraged to utilize college facilities and laboratories in addition to their prescribed course of studies

Motto:

The institution has set up entrepreneurship cell which organizes interactions for motivating and encouraging students for entrepreneurship. The institution plans with technocrats and businessmen, and organizes industrial visits for respective field of specialization to gain practical knowledge. The cell also organizes interactive talks delivered by industrial executives and experts to instill entrepreneurship spirit and zeal amongst students. It encourages the students to think creatively and innovatively and guide them in their projects. The main policy of the institution is to create awareness and promote entrepreneurship skills among students. It is to encourage the staff and students to involve themselves in innovative practices and various researches which in turn lead to research publication.

Entrepreneurship Committee: AY 2020-21

S.No.	Name	Designation	Role
1.	**Dr. SYED ABDUL SATTAR,** PRINCIPAL	**CHAIRMAN**	1. To develop and strengthen entrepreneurial qualities in the budding professionals who are interested in starting their own ventures. 2. EDC also assists all the aspirants with mentoring, planning and execution of their start up idea into a real business. 3. They also organize different activities and events from time to time to train and motivate the students on entrepreneurship.
2.	**DR. MUJAHID HUSSAINI,** HOD MECH	**PRESIDENT OF IIC**	
3.	**Dr. AMARESH BABU SOANPET**	**VICE PRESIDENT IIC**	
4.	**PROF SYED FARRUKH ANWAR,** VP ADMIN	**CONVENER**	
5.	**Mr. RAZA AHMED KHAN**	**COORDINATOR INCUBATION**	
6.	**MR.MOHAMMED KHALEEL AHMED**	**COORDINATOR IPR CELL**	
7.	**MR.NISAR AHMED**	**COORDINATOR PUBLICITY**	
8.	**DR.MOHAMMED SANAULLAH QASEEM**	**COORDINATOR NIRF RANK**	
9.	**MR.MOHD AYAZUDDIN**	**COORDINATOR-ARIIA RANKING**	

Entrepreneurship Committee: AY 2019-20

S.No.	Name	Designation	Role
1.	**Dr. SYED ABDUL SATTAR** PRINCIPAL	**CHAIRMAN**	1. To develop and strengthen entrepreneurial qualities in the budding professionals who are interested in starting their own ventures. 2. EDC also assists all the aspirants with mentoring, planning and execution of their start up idea into a real business.
2.	**Dr. MUJAHID HUSSAINI** HOD MECH	**CONVENOR**	
3.	**Dr. ZAHIR HASAN** DIRECTOR R&D	**MEMBER**	
4.	**PROF SYED FARRUKH ANWAR** VP ADMIN	**MEMBER**	
5.	**Dr. RAMESH REDDY** DIRECTOR R&D	**MEMBER**	

6.	**Mr. P RAMULU** DIPLOMA PRINCIPAL	**MEMBER**	3. They also organize different activities and events from time to time to train and motivate the students on entrepreneurship.

9.7 Co-curricular and Extra-curricular Activities (10)

Total Marks 10.00

Institute Marks : 10.00

SPORTS

For the well being and physical fitness of the students Nawab Shan Alam Khan College of Engineering & Technology provides several sports facilities outdoor as well as indoor games. Sports activities are an integral part of student's career. Our college believes that providing sports remove student's mental exhaustion. The students have shown great interest in outdoor games. Due to these extra curriculum activities students of Nawab Shah Alam Khan College of Engineering & Technology get the platform to explore their talent and excel in it. Our college celebrates Sports Day and students participate in various sports and games like table tennis, cricket, chess, caroms, volleyball, football, basketball, badminton, rangoli, mehendi and painting and the winners are awarded prizes.

Regular training is provided in the campus in order to exhibit their talent in a particular sport and game for the individual or group of students.

Under the guidance of Mr. Akeem Mohammed, B.P.Ed, (pursuing M.P.Ed) the Physical Director of the college. Students of our college participate in various level of competition including intra college events, inter university events, national events and international events. All the participants are awarded participation certificates.
The sports events could not be conducted in the year 2020 due to the COVID 19 Pandemic.

Caroms

Chess

Table Tennis

Cricket

Sports Day Celebration 2017

GRADUATION DAY

Graduation day is an annual event organised every year for Diploma, UG & PG in the campus. Eminent academicians from JNTUH, Osmania University, IITH & IIITH are invited to address the students. The chief guest congratulated the students, appreciated parents and faculties for their support in creating eminent professionals. Graduated and Post graduates received their graduation certificates from Chief Guest and Guest of Honour. Graduation day could not be conducted in the year 2020 due to the COVID 19 Pandemic.

Graduation Day celebration 2019

TECHNICAL FEST

Techno Vision is an annual event where in students of Diploma, UG & PG showcase their technical talent through various innovative models and exhibits. Students actively participate in all the events and present their work. Events like technical expo, fun events like gaming, food stalls and many more events are organised. The winners are awarded and participants are given participation certificates. Techno vision has been started since 2017-18. The annual event was conducted in 2018-19 and 2019-20 as well. How ever in the 2020-21 AY the Techno Fest is scheduled in the month of June 2021 if the pandemic situation permits.

TECHNO VISION 2018


TECHNO VISION 2020

ORIENTATION PROGRAM

Orientation Program for the newly admitted undergraduate students is an annual event organised every year. Students and their parents are formally invited. As part of the orientation program eminent academicians like JNTUH, Osmania University, IITH & IIITH are invited to address and orient the students as per the AICTE mandate. Apart from this expert from industries are also invited so as to orient the students about the industry requirements and trends.

Orientation Program 2020

A three week Students Induction Program SIP 2020 was conducted as per the directives of the AICTE from 5th to 19th December 2020. Dr. Mohammad Sanaullah Qaseem was the Coordinator and Mr. Raza Ahmed Khan and Mr. Mohammed Khaleel Ahmed were the Co-coordinators. Transition from school to university/college life is one of the most challenging events in a student's life. Usually little is done by most institutions, except for an orientation program lasting a couple of days. Due the Corona Pandemic an online Student Induction Programme was designed to help in the whole process which covered all the aspects not limited to College Introduction, Curriculum & Evaluations, Universal Human Values, Career Opportunities, Time Management, Health & Hygiene, Life Skills, Communication Skills, Why the need of Programming in today's world, Data Science, AI & ML: The difference and Applications to name a few. Students attended in good numbers. The parents were also invited to the Inaugural and the Valedictory sessions and were very impressed with the presentations and the orientation activities.

ORIENTATION & STUDENTS INDUCTION PROGRAM (SIP)

For Newly Admitted BE First Year Students 2020-21. Sessions in Red font: Institutional level sessions (common to all branches), Blue font : Departmental sessions

Day	Session # 1	Session # 2	Session # 3	Session # 4
Date	10:30 am - 11:00 am	11:00 am - 11:30 am	11:30 am - 12:00 noon	12:00 noon - 12:30 pm
SIP-Day1	INAUGURAL SESSION			
05-12-20	Complete Inaugural day Schedule attached			
SIP-Day 2	College Introduction	Curriculum & Evaluations	How to be Successful?	
07-12-20	Dr. Syed Abdul Sattar	Prof. Syed Farrukh Anwar	Mr. Nisar Ahmed	
SIP-Day 3	Bharat Bandh - No session - Rescheduled to 12-12-2020			
08-12-20				
SIP-Day 4	Universal Human Values			Computer Skills for Engineers
09-12-20	Dr. Mohammad Sanaullah Qaseem			Dr. Riyazuddin Siddiqui
SIP-Day 5	Career Opportunities		Time Management	Health & Hygiene
10-12-20	Dr. Syed Mujahid Hussaini		Dr. G. S. Rao	Dr. Atif Ismail (DARE)
SIP-Day 6	Life Skills		Jobs & Placements	
11-12-20	Prof. Raza Ahmed Khan		Mr. M. S. Bhatia	
SIP-Day 7	Communication Skills	Role of Engineers in our Society	Role of Chemistry in our Everyday Life	

12-12-20	**Ms. Sabiha Khatoon**	**Dr. Zahir Hasan**	**Dr. Mir Moazzam Ali**
SIP-Day 8	**Why the need of Programming in today's world**		**Details of Academic Regulations**

14-12-20	Mr.Mohammed Khaleel Ahmed	MR. Mohammed Ayazuddin	
SIP-Day 9	Beware with Cyber Attacks	A New Era Of Emerging Technologies: Welcome To The Age Of Intelligence	
15-12-20	Ms. Firdous Rehana	Ms. Syeda Farhath Begum	
SIP-Day 9	Evolution of Digital Electronics	Data Science, AI & ML: The difference and Applications	
16-12-20	Mr. D. Akbar Hussain	Ms. Fareeha Rasheed (MANUU)	
SIP-Day 10	Information Technology, trends and Cognitive Skills	Necessity of Block Chain in Today's Era	Career Opportunities
17-12-20	Mr. Q.M. A. Basheer	Ms. Waseema Masood	Ms. Munawar Khatoon
SIP-Day 11	Computer Skills for Engineerings	Cyber Security & Preventions	Recap and Feedback Session
18-12-20	Dr. Riyazoddin Siddiqui	Ms.Asma Mehdia	Dr. Mohammad Sanaullah Qaseem
SIP-Day12	VALEDICTORY SESSION		
19-12-20	Complete Valedictory day Schedule attached		

Orientation Program 2018

Sports Facilities

List of Outdoor Games Facilities:

S.No	Name of the sport facility
1	Cricket
2	Volleyball court
3	Football Field
4	Basketball court(cement floor)
5	Badminton court
6	Archery

List of Indoor Games Facilities:

S.No	Name of the sport facility
1	Table tennis
2	Caroms
3	Chess

List of sports events participated in 2018-19

S.No	Date	Event	Conducted	Level	Place Visit
1.	06-09-2019 & 07-09-2019	Volleyball	Osmania university	Inter college university	Bhavan's degree college,shainikpuri ,sec-bad.
2.	19-09-2019 20-09-2019 21-09-2019	Volleyball, Football & Cricket	Vardhaman College of Engineering	college sports fest	Nagarguda shamshabad road, kacharam, Hyderabad,telangana 501218
3.	01-10-2019	Wrestling	JNTU	Inter college university	LB stadium
4.	14-10-2019 to 20-10-2019	Football	Reliance youth foundation	Knot out match	CMR Clg , Vijayanagar Colony Ground .

5.	31-10-2019	Football	Reliance youth foundation	Qualifying Match	Vijayanagar colonyground
6.	01-11-2019	Football	Sports tourism of Inida	State level Match	Sports City Resort , Moinabad
7.	02-11-2019	Football	Reliance youth foundation	Group stage Match (Quater Final)	Vijayanagar colonyground
8.	07-11-2019, 08-11-2019	Volleyball	Marri Laxman Reddy Institute of Technology	College Fest	Dundigal policestation, road, Hyderabad, Telangana 500043
9.	13-11-2019 to 20-11-2019	Draught game	Draughts association of india	National level	C.L Aggarwal D.A.V Model School, Sector-7B, Chandigarh
10.	15-11-2019 to 17-11-2019	Football	1St 7-A Side Football National championship-2019	National Level	Vikramaditya Global School, Sampla(Rohtak) Haryana.
11.	25-1-2019	Football	osmaina medial college from reliance youth foundation	Friendly match	Osmania medicalcollege, Koti.
12.	18-12-2019 23-12-2019	Cricket	6A side cricket Federation of india	National level	Punjab public school, Nabha, Punjab.
13.	28-12-2019 29-12-2019 30-12-2019	Football	Sports tourism of india & maheshwari international school	National level	Ajmer , Rajasthan

National Service Scheme (NSS)

NSS volunteers of our college are playing a major role in creating health awareness. The main objectives of NSS are to identify the needs and problems of the community and involve them in problem solving, to develop a sense of social and civic responsibility, utilise their knowledge in finding practical solutions to individual and community problems, acquire leadership qualities and democratic attitudes and gain skills in mobilising community participation.

The NSS has organised many activities that had great impact on faculties and students

- Free Eye Check-up Camp was organised by "Kanti Velugu" Govt.of Telangana on 4th October 2018 at the seminar hall of the college enabling the
- faculties, Students and locality people known their visual defects like eye diseases, infections need of spectacles, their numbering etc. Our college students and NSS volunteers had planted about 1000 saplings in premises of the college.
- As part of Swacch Bharat program students of Nawab Shah Alam Khan College have participated and engaged themselves cleaning of the roads leading to the college.
- An awareness programme on crime against women was organised by SHE TEAM Hyderabad City Police.
- Faculty and students participated in PADA YATRA on the occasion of 150th birth anniversary of Mahatma
- Gandhi on 15th August 2019A Dental Camp was organised under national service scheme by Bright Smile Super Speciality Hospital.
- Students and volunteers actively participated in Haritha Haram, a flagship program of
- Telangana government.Engineers Day is celebrated to commemorate the Birth anniversary of Sri. M. Visvesvaraya.
- A blood donation camp was organised under national service scheme in coordination with Princess Esra Hospital.
- A fifteen day programme on Jal Shakti Abhiyan, working on war footing to save water and Single Use Plastic, to make plastic free India was organised.

List of NSS activities during the year 2020-21

S. No	Date	Name of theactivity	Organizing unit/agency/collaborating agency	No. Of students/faculties/volunteers participated
1	21-07-2020	Food distribution to the needy during the COVID Pandemic	NSS	10
2	20-10-2020	Flood relief work in Hyderabad affected areas	NSS	15

List of NSS activities during the year 2019-20

S. No	Date	Name of the activity	Organizing unit/agency/collaborating agency	No. Of students/faculties/volunteers participated

1	23-10-2019	Awarenes s programm e on crime against women	SHE TEAM Hyderabad City Police/NSS	45
2	15-08-2019	One student one tree initiative	NSS	750
3	15-08-2019	PADA YATRA	NSS	190
4	01-09-2019 to 15-09-2019	Jal Shakti Abhiyan	NSS	62
5	01-09-2019 to 15-09-2019	Single Use Plastic	NSS	62
6	15-09-2019	Engineers Day	NSS	760
7	30-08-2019	Haritha Haram	NSS	180

List of NSS activities during the year 2018-19

S.No	Date	Name of the activity	Organizing unit/agency/collaborating agency	No. Of students/faculties/volunteers participated
1	31-04-2019	World No Tobacco Day	NSS	54
2	04-10-2018	Eye Check-up Camp	Kanti Velugu, Govt of Telangana	61

List of NSS activities during the year 2017-18

S.No	Date	Name of the activity	Organizing unit/agency/collaborating agency	No. Of students/faculties/volunteers participated
1	23-01-2018	Dental Camp	NSS/BRIGHT SMILE SUPER SPECIALITY HOSPITAL	474

2	20-01-2018	Tree plantation inmemory of Mr. Nawab Shah Alam Khan	NSS	112
3	20-09-2017	Swacch Bharat Abhiyan	NSS	199
4	30-08-2017	Haritha Haram	NSS	188

List of NSS activities during the year 2016-17

S.No	Date	Name of the activity	Organizing unit/agency/collaborating agency	No. Of students/faculties/volunteers participated
1	10-05-2017 to 11-05-2017	Eye Check-up Camp	NSS/RX OPTICALS	760
2	22-04-2017	Blood Donation Camp	NSS/PRINCESS ESRA HOSPITAL	89
3	13-04-2017	Swacch Bharat Abhiyan	NSS	182

NSS Activities during 2020-21 (Flood relief work)

Eye Check-up Camp "Kanti Velugu" (04-10-2018)

Haritha Haram (30-08-2019) **Engineers Day (15-09-2019)**

Awareness Programme on Crime Against Women (23-10-2019)

Blood Donation camp (22-04-2017)

Dental Camp (23-01-2018)

10 GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (120)

Total Marks 120.00

a. **Organization, Governance and Transparency** (40)

Total Marks 40.00

i. **State the Vision and Mission of the Institute** (5)

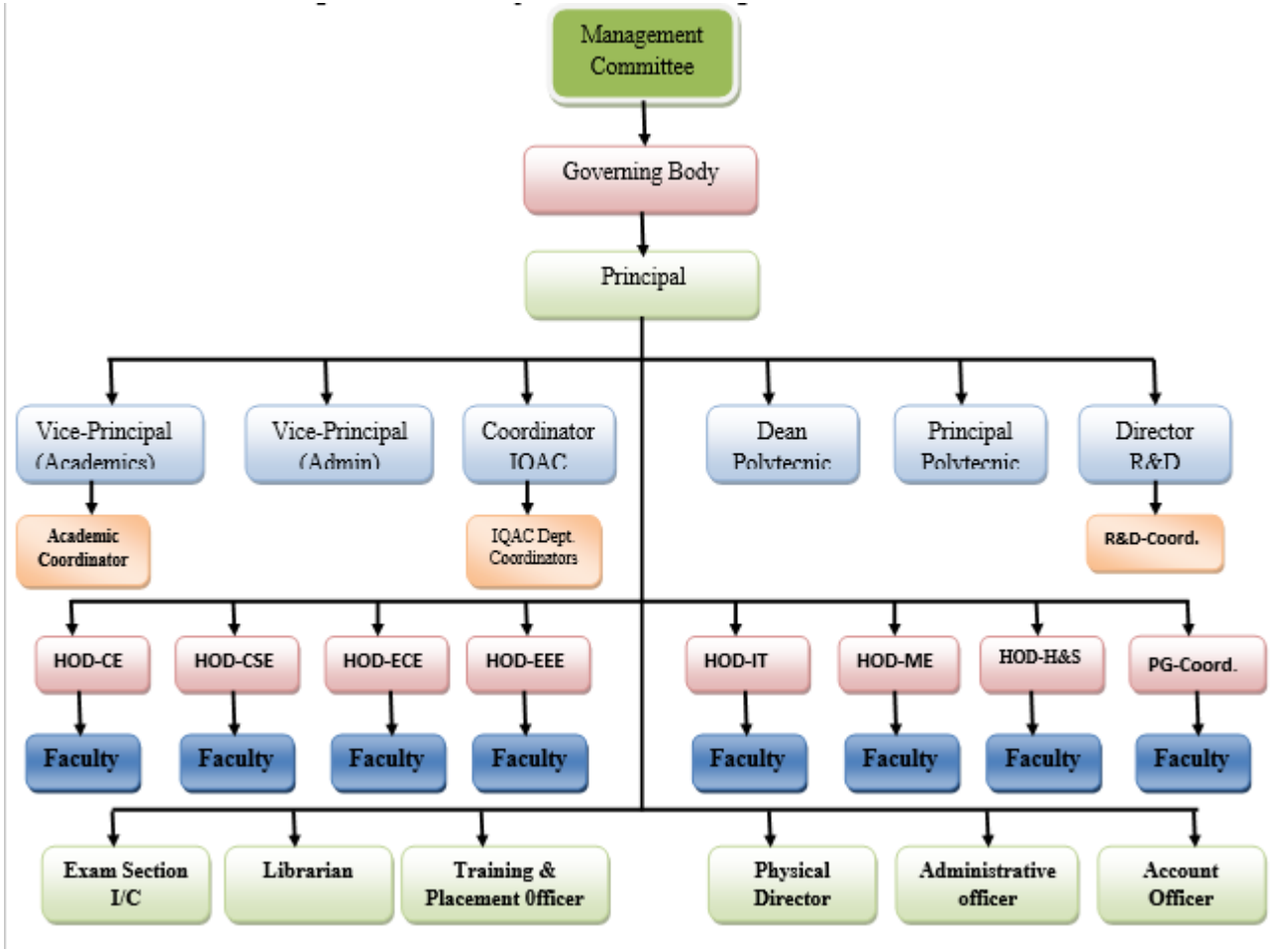
Institute Marks : 5.00

Vision :
To impart quality technical education with strong ethics, producing technically sound engineers capable of serving the society and the nation in a responsible manner.
Mission :
M1: To provide adequate knowledge encompassing strong technical concepts and soft skills thereby inculcating sound ethics. **M2:** To provide a conducive environment to nurture creativity in teaching- learning process. **M3:** To identify and provide facilities which create opportunities for deserving students of all communities to excelin their chosen fields. **M4:** To strive and contribute to the needs of the society and the nation by applying advanced engineering and technical concepts.

ii. **Governing body, administrative setup, functions of various bodies, Service rules, procedures, recruitment and promotional policies** (10)

Institute Marks : 10.00

Nawab Shah Alam Khan College of Engineering and Technology was established in the year 2008 under Madrasa-i-Aizza Society. The institution has a governing body that makes policy decisions after identifying the needs of the college and to achieve the vision and mission of the institution. It has an effective organization structure which monitors and improves the overall performance. The organizational structure of the institution is given below. The organizational structure of the institute fulfills the two aims of good governance and implementation of the Academic Plan. Supplementary committees and other bodies provide guidance, feedback, review, allowing evolution and adaptation to the changing educational societal needs.



Organization Structure of NSAKCET

1. List of governing body composition and other academic and administrative bodies I) Governing Body Members:

The Institution has a governing body. It is a policy making body of the institution and meets frequently and discusses the agenda prepared by the Member Secretary. It reviews the performance of the institution and decision taken in the previous meeting and also approves the policy decisions.

Table: 10.1.1. Members of Governing Body 2021-2022

S. No.	Name	Position in Governing Body
1	**Mr. MEHBOOB ALAM KHAN**	**CHAIRMAN**
2	**Mr. MUJAHID ALAM KHAN**	**MEMBER**
3	**Dr. MIR MOAZZAM ALI**	**MEMBER**
4	**Mr. AHMED BAIG**	**EDUCATIONIST MEMBER**
5	**Mr. HAJI SAJJAD**	**BUSINESSMAN MEMBER**
6	**Dr. SYED ABDUL SATTAR (PRINCIPAL)**	**MEMBER SECRETARY**
7	**REGIONAL OFFICER, SCRO**	**AICTE NOMINEE**
8	**DR. MANZOOR HUSSAIN**	**UNIVERSITY NOMINEE**
9	**TSCHE nominee**	**GOVT. NOMINEE**
10	**MR. SYED FARRUKH ANWAR**	**MEMBER**
11	**DR. MOHAMMAD SANAULLAH QASEEM**	**MEMBER**

Independent Body/ Major Commitee	Functions
Management Committee	➢ Chief patron of the Institution. ➢ They are the Executive Trustees and Members of the Governing body ➢ They are the final authority for annual (financial) budget allocations and all related approvals. ➢ They hold signatory roles in major administrative, recruitment, purchase, expansion, and Policy decisions of the Institution. ➢ Define Rules, Procedures, Recruitment and Promotional Policies, etc.., ➢ The rules, procedures and policies regarding recruitment, promotion and services of all faculty and staff are well defined by the Madrasa-i-Aizza Society following the norms of Govt. of Telangana , AICTE & OU/JNTUH time to time.
Chairman of Governing Body	Chairman is the Chief Mentor of the Institution, and heads the Governing Body. He is the final authority to provide final approval for all major policy matters on expansions, collaborations, financial outlays, budgetary allocations and major admin related decision.

	Motivate and support the administration to make our institute an outcome based institution.
Director/Principal	He functions as the Head of the Institution and is the Member Secretary of the Governing body. He is responsible for overall development of the Institution. Ensure the attainment of vision of the Institution through strategic mission. Define quality policy and objectives. Define & delegate responsibilities of various positions in the organization. He is the final authority for all academic, admission, administrative, co-curricular and extracurricular, research, placement, innovation, resource mobilization, planning and development, recruitment. He also coordinate the needs of meeting statutory and regulatory requirements of the government (AICTE, UGC, DTE) and University (OU/JNTUH). He channelizes the growth and benchmarking activities of accreditation (NBA/NAAC) and affiliation (OU/JNTUH) processes for the institute. He is the single point contact (SPC) for external bodies (industries, academia, regulators, institutions/organizations, companies) and also for stakeholders: industries, parents and alumni. He develops roadmap(s) for the institute, in consultation with his team and disseminates it to all concerned.
Vice Principal (Academics)	To discharge routine academic duty of Principal in his absence. Head of the Internal Quality Assurance cell. Alumni interaction. Prepare and execute academic calendar. Oversee the teaching-learning process. Carry out result analysis and submit corrective measures to Principal. Initiate better teaching learning methods, Co-curricular activities. Formation of student chapters, Sports &Cultural activities.
Vice Principal (Admin)	Overall in-charge to execute different Office Administrative sections i.e., Accounts, Admissions, Exams, Scholarships and coordinates Governing Council meetings. Liasoning with AICTE, DTE and University. Service Books, Faculty personal files & Recruitment process. Maintain minutes of meeting for all new proposals. Coordinate day to day activities of office. Purchase process & payments. Preparation of Annual Institute budget.
Director R&D	To motivate and mend the faculty & students in developing Research culture. To develop the Research laboratories. To guide the faculty & students in publishing articles in Journals. To assist in writing project proposals for grant of funds.
Training & Placements officer	T & P officer is solely responsible for planning, connecting, organizing, culminating all activities leading to placement needs of the graduating students. He develops and nurtures contacts/connects with industries/companies/ organizations/alumni database in view of placement needs. He ensures the smooth coordination with various stakeholders required for the process of placement. He initiates the process of feedback collection from the visiting companies/organizations for offering placement and shares with concerned departments for better understanding and possible improvements in the subsequent sessions/years.

	He coordinates activities for pool-in placement drives. Facilitate career guidance to the students. He significantly contributes in building brand value of the institution.
Librarian	The Librarian is responsible for the resources of Library and information Centre comprising of assets in both hard and soft forms. The associated duties are: He envisages the plans, initiates actions for addressing all possible needs of primary stakeholders - students, teachers and research scholars (via identifying and ordering books, reference material, journals, online resources, issue of resources and maintain of records). He with her team undertakes series of tasks towards optimal utilization and for maintenance of the library. Maintain library discipline and culture. Prepare annual budget for library.
Director Physical Education	Proposing annual budget. Creation and upkeep of sports facilities. Purchasing of sport items. Conduct training camps. Ensure smooth conduct of sports. Encourage students to participate in zonal tournaments.
Head of Departments	He is the functional and administrative head of the concerned department. He ensures the smooth running of the concerned department by laying goals and milestones of the department. Vision and Mission statements too are chalked out for streamlining all further actions. HOD builds and leads the team of required numbers of faculty members (Professors, Associate Prof and Assistant Prof), staff (Lab Instructors, Lab Assistants, Admin staff) and students - II, III and IV year B.E(CSE,ECE,IT,ME,EEE &CE), M.E/ M.Tech in CSE, ECE , CE & ME and I Year in case of Mathematics, Physics, Chemistry departments. The HOD ensures planning, execution, troubleshooting of all academic activities (theory and lab classes), examination (CIE) along with supporting smooth conduction of OU examinations, research and publication, projects and developmental activities. He/she coordinates intra (with IIIC, T & P and other depts. / centres at the institute) and inter (with other academia and industries) institutional communicational roles. HOD plans and organizes events (conference, seminars, workshops, and training) and conducts industrial visits and guest lecturers for the benefit of dept. (students and faculty members). He/she organizes meetings with stakeholders (particularly, parents) in form of PTM. **The additional roles and responsibilities**: Develop Calendar of events, Timetables for each section/semester, Upkeep and maintain records of the department, maintain laboratories and assets, assign duties and monitor faculty performance, verifies faculty appraisal, benchmark the growth parameters, monitor mentoring of students by the mentors (faculty team), identify and execute action on departmental needs Develop team towards audits and compliance, monitor R&D and project activities of the department, ensure up-keeping of departmental library, lead team towards publications and IP, seek MOUs from related industries. He/she renders all support to the team lead, Principal. He/she encourages and motivates the team to contribute for thepositive growth of the department, in turn the institution.

Faculty Members	Teachers (based on seniority and competencies) support various activities/roles in department functioning: Developing Timetables, Calendars, Manuals etc. The primary role of each faculty (Prof/Assoc. Prof. /Asst.• Prof.) is delivering lectures (theory classes) and conducting lab sessions (Practical classes) as per the allotted Timetable. Counseling and mentoring the students, maintain Academic/Course files, plan and conduct tests, design assignments/projects for students, discharge examination duties, and evaluate as per OU/JNTUH norms. Aid/assist in co-curricular and extracurricular activities as assigned by the department. Teachers are expected to collaborate, conduct R &D activities and undertake industrial/sponsored projects, publish and present papers, seek growth opportunities and participate in FDPs and update technical knowledge and keep abreast with developments in their domain.

Meeting:

The Governing Body meets at least twice a year. All such meetings held within the Institute campus. In the absence of the Chairman, the members can elect a pro-term Chairman from amongst the members present for that meeting. It shall be the responsibility of the Member Secretary to ensure that the meetings are held regularly and the minutes are recorded. The presence of the University nominee for the meetings is mandatory.

Functions:

The Governing Body besides being the supreme administrative authority

- of the College, have the following additional functions To monitor the academic and other related activities of the College.
- To consider the recommendations of the Staff Selection Committee.
- To consider the important communications, policy decisions received from the University, government, AICTE, etc., from time to time. Tomonitor the students' performances and faculty development programmes.
- To consider the recommendations of planning and monitoring board of the College for implementation. To pass the annual budget of the College.
- To check the audited income and expenditure accounts and approve the same for the College annually. To approve the increase/reduction of intake, courses, new and closure
- To monitor the steps taken for students' training and placement activities.

II) Different committees and frequency of meeting

There are number of committees in the college which work for the welfare of the students and faculties. The members of these committees are nominated by the chairman of the governing body. The various committees along with conveners are as follows:

Table: 10.1.2. Various Committees with Conveners

S. No.	Names of the committee	Name of the Chairman/Convener	Frequency of Meetings
1	Finance Committee	Dr. Syed Abdul Sattar	Yearly twice
2	College Academic Committee	Dr. Mohammad S Qaseem	Yearly four times
3	Women Protection Committee	Ms. Shanila Mehreen	Yearly twice, as and when required
4	Entrepreneurship Development Cell	Dr. S. Mujahid Hussaini	Yearly twice
5	Grievance Redressal Cell	Mr. Raza Ahmed Khan	Yearly twice, as and when required
6	R & D Cell	Dr. Zahir Hasan	Yearly twice
7	Anti Ragging Committee	Mr. Mohammed Zaker	Yearly twice
8	Internal Quality Assurance Committee	Dr. Mohammad S Qaseem	Quarterly
9	Sports & Cultural Committee	Mr. Hakeem	Quarterly
10	Disciplinary Committee	Mr. Syed Farrukh Anwar	Yearly Twice As and when required
11	Staff Selection Committee	Dr. Mohammad S Qaseem	Yearly twice
12	Training and Placement Committee	Mr.Mahesh Singh Bhatia	Quarterly
13	Alumni Association	Mr. Mohammed Ayazuddin	Yearly once
14	Examination Monitoring Committee	Mr. Vijay K. Gudivada	Bi-Monthly
15	Library Committee	Dr. Mujahid Hussaini	Yearly twice
16	Industry Institute Interaction Committee	Dr. S.Mujahed Hussaini	Yearly twice

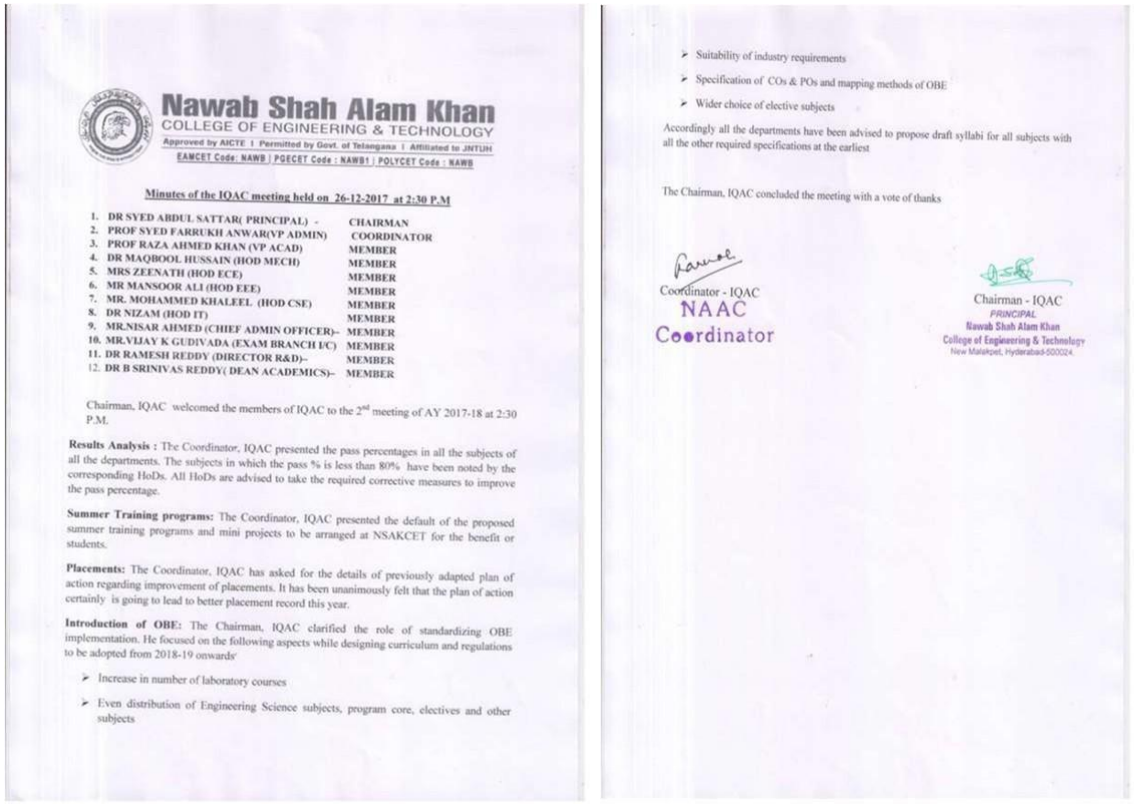
17	SC/ST Committee	Mr. P. Ramulu	Yearly twice
18	NSS Committee	Mr. Mohd. Abdul Moyeed	Quarterly
19	Staff & Student Feedback Committee	Mr. Mohd. Khaleel Ahmed	Quarterly
20	Committee for Differently Abled	Ms. Rehana Firdous	Yearly twice
21	IPR Cell	Dr. S. Mujahid Hussaini	Yearly twice
22	Time Table Committee	Mr. Syed Farrukh Anwar	Yearly twice
23	BOG	Dr. Syed Abdul Sattar	Yearly twice
24	Minority / OBC	Mr. Mohd. Nayeem	Yearly twice

A. Service rules, Policies and procedures:

The institution has its own service rules, policies and procedures for effective functioning of the institution. It is published in 2015.All these are available at Principal's office, HOD's office and institution website.

Service rules, Policies and procedures are attached herewith

A. Minutes of the meeting and action taken report



Nawab Shah Alam Khan
COLLEGE OF ENGINEERING & TECHNOLOGY
Approved by AICTE | Permitted by Govt. of Telangana | Affiliated to JNTUH
EAMCET Code: NAWB | PGECET Code : NAWB1 | POLYCET Code : NAWB

Minutes of the IQAC meeting held on 26-12-2017 at 2:30 P.M

1.	DR SYED ABDUL SATTAR(PRINCIPAL) -	CHAIRMAN
2.	PROF SYED FARRUKH ANWAR(VP ADMIN)	COORDINATOR
3.	PROF RAZA AHMED KHAN (VP ACAD)	MEMBER
4.	DR MAQBOOL HUSSAIN (HOD MECH)	MEMBER
5.	MRS ZEENATH (HOD ECE)	MEMBER
6.	MR MANSOOR ALI (HOD EEE)	MEMBER
7.	MR. MOHAMMED KHALEEL (HOD CSE)	MEMBER
8.	DR NIZAM (HOD IT)	MEMBER
9.	MR.NISAR AHMED (CHIEF ADMIN OFFICER)-	MEMBER
10.	MR.VIJAY K GUDIVADA (EXAM BRANCH I/C)	MEMBER
11.	DR RAMESH REDDY (DIRECTOR R&D)-	MEMBER
12.	DR B SRINIVAS REDDY(DEAN ACADEMICS)-	MEMBER

Chairman, IQAC welcomed the members of IQAC to the 2nd meeting of AY 2017-18 at 2:30 P.M.

Results Analysis : The Coordinator, IQAC presented the pass percentages in all the subjects of all the departments. The subjects in which the pass % is less than 80% have been noted by the corresponding HoDs. All HoDs are advised to take the required corrective measures to improve the pass percentage.

Summer Training programs: The Coordinator, IQAC presented the default of the proposed summer training programs and mini projects to be arranged at NSAKCET for the benefit or students.

Placements: The Coordinator, IQAC has asked for the details of previously adapted plan of action regarding improvement of placements. It has been unanimously felt that the plan of action certainly is going to lead to better placement record this year.

Introduction of OBE: The Chairman, IQAC clarified the role of standardizing OBE implementation. He focused on the following aspects while designing curriculum and regulations to be adopted from 2018-19 onwards'

- Increase in number of laboratory courses
- Even distribution of Engineering Science subjects, program core, electives and other subjects
- Suitability of industry requirements
- Specification of COs & POs and mapping methods of OBE
- Wider choice of elective subjects

Accordingly all the departments have been advised to propose draft syllabi for all subjects with all the other required specifications at the earliest

The Chairman, IQAC concluded the meeting with a vote of thanks

Coordinator - IQAC
NAAC
Coordinator

Chairman - IQAC
PRINCIPAL
Nawab Shah Alam Khan
College of Engineering & Technology
New Malakpet, Hyderabad-500024.

Sample copies of minutes of meeting

Nawab Shah Alam Khan
COLLEGE OF ENGINEERING & TECHNOLOGY
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Feedback Committee

Proceedings of the Principal

Present: Dr.Md Yousuf Ali

Date :16-02-2016

Order:

The Principal is pleased to constitute the Feedback Committee with the following members;

Institution Nominees

S.No	Name of Committee	Designation	Department	Designation
1.	Dr.Md Yousuf Ali	Principal	Mech	Chairman
2.	Prof. Syed Farrukh Anwar	Professor & HOD	Civil	Member
3.	Prof. Raza Ahmed Khan	Professor	Mech	Member
4.	Dr. Syed Mujahid Hussaini	Prof & HOD	Mech	Member
5.	Dr. Mir Moazzam Ali	Professor	Chem	Member
6.	Ms. Zeenath	Assoc.Prof	ECE	Member
7.	Mr. Uzair Ali	Assoc Prof	EEE	Member
8.	Mr. Nisar Ahmed	CAO	H&BS	Member

Principal

PRINCIPAL
Nawab Shah Alam Khan
College of Engineering & Technology

Copy to:

1. The Director
2. All the Members
3. File

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Date : 21/10/2016

Minutes of Meeting

Student Feedback Analysis on Curriculum and Syllabus Report

The Principal is pleased to constitute the Feedback Committee with the following members;

S.No	Name of Committee	Designation	Department	Designation
1.	Dr.Md Yousuf Ali	Principal	Mech	Chairman
2.	Prof. Syed Farrukh Anwar	Professor & HOD	Civil	Member
3.	Prof. Raza Ahmed Khan	Professor	Mech	Member
4.	Dr. Syed Mujahid Hussaini	Prof & HOD	Mech	Member
5.	Dr. Mir Moazzam Ali	Professor	Chem	Member
6.	Ms. Zeenath	Assoc.Prof	ECE	Member
7.	Mr. Uzair Ali	Assoc Prof	EEE	Member
8.	Mr. Nisar Ahmed	CAO	H&BS	Member

The feedback was collected from the students for the academic year 2016-2017, I semester and the analysis was carried out on that feedback to give the following information.

Number of Students from which feedback was taken:

Total Number of Students	Feedback Received
1238	627

Analysis of Feedback: The following is the information about the number of students given the various Grading with the Point Scale

Point Scale	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
No. of Students	187	262	143	35	0

With this Feedback Analysis, the working of college was found to be **"Agree"** as the point scale to the statements given in the Feedback Forms.

The feedback was thoroughly examined and came up with some key points from the remarks.

Problems Encountered:

1) Some students are not able to manage the time in the end semester exams.
2) Final year students are not able to get a platform to get in contact with the companies.

Action Taken:

1) For the practice of the students to manage time and study well before exams, we will be conducting Pre Final exams.
2) The college will also be organizing the Job Fair, so that the students of final year will be getting an opportunity to face the interviews of different companies and get placed.

The following are the statements considered for evaluating the Feedback

A. CONTENT COURSE

1. The faculty covers the entire syllabus and topics in detail.
2. The faculty possesses deep knowledge of the subject taught
3. The faculty communicates clearly

B. TEACHING LEARNING PROCESS

1. The faculty is punctual and engages the class for the full duration and completes the course in time
2. The teacher comes fully prepared for the class
3. The teacher provides guidance counseling in academic and nonacademic matters in / outside the class
4. The teacher pays attention to academically weaker students as well
5. The teacher relates the course material with real world situations
6. The teacher's attitude toward the students was friendly and helpful

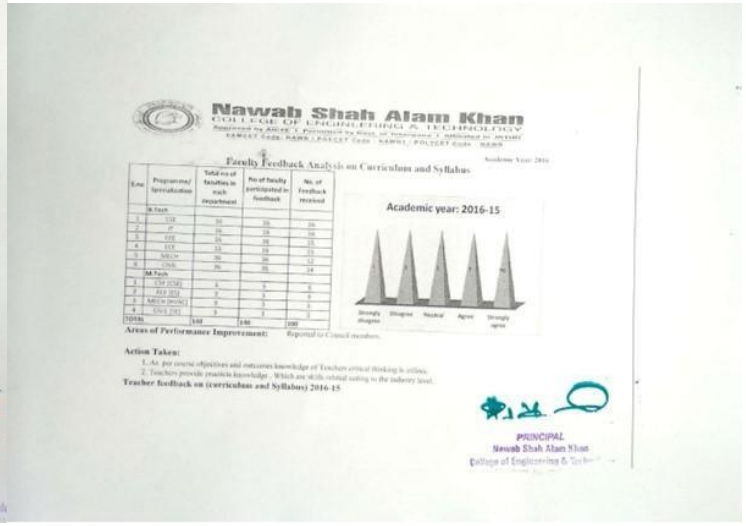
C. EVALUATION PROCESS

1. Periodical assessments were conducted as per schedule
2. Question paper covers all the topics in the Curriculum
3. The teacher was fair and unbiased in the evaluation Process
4. Overall Rating of the Teacher: In my view the teacher has professional competence and is a role model

D. STUDENTS FEED BACK ON LIBRARY

1. How often do you visit the Library
2. Are the required number of titles in your Subject available in the Library
3. Are you satisfied with the cataloguing and arrangement of books in the Library
4. Are the Library Staff cooperative and helpful
5. Any suggestion: _____

Principal
PRINCIPAL
Nawab Shah Alam Khan
College of Engineering & Technol



Nawab Shah Alam Khan
COLLEGE OF ENGINEERING & TECHNOLOGY

Faculty Feedback Analysis on Curriculum and Syllabus

S.no	Programme/ Specialization	Total no of faculties in each department	No of faculty participated in feedback	No. of Feedback received
	B.Tech			
1	CSE	30	28	28
2	IT	16	14	14
3	ECE	16	16	16
4	EEE	15	15	15
5	MECH	30	28	12
6	CIVIL	26	05	14
	M.Tech			
1	CM (CSE)	5	5	5
2	PED (ECE)	5	5	5
3	MED (MECH)	5	5	5
4	CNS (EE)	5	5	5
TOTAL		160	146	109

Academic year: 2016-15

Areas of Performance Improvement: Reported to Council members.

Action Taken:

1. As per course objectives and outcomes knowledge of Teachers critical thinking is utilized.
2. Teachers provide practical knowledge . Which are skills related suiting to the industry level.

Teacher feedback on (curriculum and Syllabus) 2016-15

PRINCIPAL
Nawab Shah Alam Khan
College of Engineering & Technology

Nawab Shah Alam Khan
COLLEGE OF ENGINEERING & TECHNOLOGY

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EAMCET Code: NAWB | PGECET Code : NAWB1 | POLYCET Code : NAWB

College Feedback Committee Minutes of Meeting

Held on 16-02-2016 at 11:00 AM

Venue: NSAKCET Seminar Hall, Block G

Members Present:

Institution Nominees

S.No	Name of Committee	Designation	Department	Designation
1.	Dr.Md Yousuf Ali	Principal	Mech	Chairman
2.	Prof. Syed Farrukh Anwar	Professor & HOD	Civil	Member
3.	Prof. Raza Ahmed Khan	Professor	Mech	Member
4.	Dr. Syed Mujahid Hussaini	Prof & HOD	Mech	Member
5.	Dr. Mir Moazzam Ali	Professor	Chem	Member
6.	Ms. Zeenath	Assoc.Prof	ECE	Member
7.	Mr. Uzair Ali	Assoc Prof	EEE	Member
8.	Mr. Nisar Ahmed	CAO	H&BS	Member

Agenda : parent's feedback analysis report.

We receive feedback from parents, Receiving positive or negative feedback from parents is important as both these are crucial in helping monitor and evaluate the provision. Listening to what parents say is a contributing factor to running a successful organization.

Overall parent's feedback performance is "AGREE".

Principal

PRINCIPAL
Nawab Shah Alam Khan
College of Engineering & Technology
New Malakpet, Hyderabad

Copy to:

1. The Director
2. All the Members
3. File

✆ : 040-24576985

NAWAB SHAH ALAM KHAN COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by AICTE, Govt. of Telangana, Affiliated to JNTUH Hyderabad)

16-4-1/A, New Malakpet, Hyderabad - 500 024 | Email : nsakcet@gmail.com | Website : www.nsakcet.ac.in

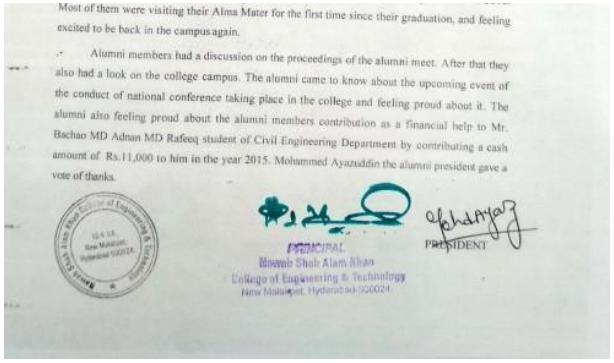
Ref. No. NSAKCET/2016/MOM/Alumni/003 Date : 20-7-2016

MINUTES OF MEETINGS -ALUMNI MEET REPORT- 2016

The following members has attended the meeting

1. Mohammed Ayazuddin	President	
2. Abdul Muqueeth	Vice President	
3. Mohd Riyan	General Secretary	
4. Mohammed Abdul Rafay Hazari	Joint Secretary	
5. Farzana Siddique	Member	

Nawab Shah College of Engineering and Technology College organized its third Alumni Meet on 20th July 2016. Many of the alumni played active role in contacting their batch mates and others. The Meet was attended by 74 alumni of batch that graduated in year 2014 to 2016.



Most of them were visiting their Alma Mater for the first time since their graduation, and feeling excited to be back in the campus again.

Alumni members had a discussion on the proceedings of the alumni meet. After that they also had a look on the college campus. The alumni came to know about the upcoming event of the conduct of national conference taking place in the college and feeling proud about it. The alumni also feeling proud about the alumni members contribution as a financial help to Mr. Bachao MD Adnan MD Rafeeq student of Civil Engineering Department by contributing a cash amount of Rs.11,000 to him in the year 2015. Mohammed Ayazuddin the alumni president gave a vote of thanks.

PRINCIPAL
Nawab Shah Alam Khan
College of Engineering & Technology
New Malakpet, Hyderabad-500024

PRESIDENT

iii. **Decentralization in working and grievance redressal mechanism** (10) Institute Marks : 10.00

1. List of faculty members and their delegated powers

The institution has various committees to ensure the decentralization and efficient execution of academic and administrative work. Each committee has one coordinator and faculty members from every department. These committees are monitored by the head of the institution. All these committees are involved in data collection, organizing activities, periodical reviews and providing suggestions for further actions. They frequently conduct meetings and maintain the records.

Table: 10.3. Delegation of Powers

S. No.	Faculty Name	Delegated Power	Decision/Activity
1	Dr. Syed Abdul Sattar	Chairman/ConvenerFinance Committee	To prepare budget for the financial year based on probable income and expenditure related to the grants received/receivable from UGC ifany, and income from fees, etc. To plan for the functional and developmental activities of the institute on par with the latestcontemporary technological developments.
2	Dr. Mohammad SQaseem	Chairman/Convener College Academic Committee	To review the academic and other relatedactivities of the institution.To review the students and facultydevelopment programs. To visualize and formulate perspective plansfor the development and growth of theCollege / Institute.
3	Ms. Pushpanjali Patra	Convener Women Protection committee	To address the needs of women faculty, staff& students To identify the personal issues so that the women will have gender equality & dignity

4	Dr. S. Mujahid Hussaini	Convener Entrepreneurship Development Committee	To conduct different entrepreneurship awareness & Skill development programme in thecollege premises among the young technocrats. To motivate the young technocrats for innovation, new idea generation & start up.
5	Mr. Raza Ahmed Khan	Convener Grievance Redressal Committee	To enquire into complaints or grievances received from aggrieved students and faculty.To take corrective measures.
6	Dr. Mujahid Hussaini	Convener R & D Committee	To help the faculty and staff in submitting the proposals to AICTE, DST etc.To guide the faculty in identifying industry oriented projects
7	Dr. Amaresh Babu	Convener Anti Ragging Committee	To Prevent ragging in campus and surrounding areas
8	Dr. Mohammad SQaseem	Convener InternalQuality Assurance Committee	Development and application of quality benchmark / parameters of various activities inthe institution. Facilitating the creation of a learner- centric environment conducive to quality educationand faculty maturation to adoptthe required knowledge and technology for participatory teaching and learning process.
9	Mr. Hakeem	Convener Sports and Cultural Committee	To plan and schedule cultural and sportsevents for the academic year. To suggest the methods so that students and faculty utilize sports and games facilitiesavailable in the college. To conduct science Tech-fest by involving students on recent technological developments.
10	Mr. Syed FarrukhAnwar	Convener Disciplinary Committee	To maintain discipline in classroom andcampus.
11	Mr. S. Bhatia	Convener Training and Placement	To provide information about various careers available in this competitive world. To conduct campus recruitment training program by making MOU with the companies.To enhance the soft skills of students so that they will be ready for industry. To identify industries/software companies and convince them for campus placement.

12	Mr. Mohd Ayazuddin	Convener Alumni Association	Maintaining communication channels with alumni keeping them informed of institutionalachievements and make them part of the institutions future. Participate actively in strategic and long-range program planning to promote alumniawareness and commitment to the college.
13	Dr. S. Mujahid Hussaini	Convener Library Committee	To suggest improvements to run the library smoothly, orderly and satisfactorily. To suggestimprovements in digital library.

2. Mechanism and composition of grievance redressal Cell GrievanceAppeal Committee:

The Grievance Appeal committee is intended to undertake the processes of attending to the grievances put forward by the students and staff. It focuses on setting proper facilitation procedures for settling the issues in a cordial atmosphere. The committee is expected to initiate proper or appropriate enquiry or investigative mechanism within 24 hours from the receipt of the complaint in written form duly signed by complainant(s). The committee is expected to meticulously adhere to the standard arbitration procedures of the college and Government of Telangana. The institute made online grievance Redressal mechanism. The grievance can be submitted online in addition to offline also.

Scope of the operations:

The committee shall take into consideration all the redressal criteria and rules and regulations of the college and government of Telangana both in admitting the complaint and in conducting the enquiry. The committee is expected to commence its operations by constituting a special committee in case of need.

The observations, findings, suggestions and recommendations are merely recommendatory in nature and do not carry any legal binding for the college to follow or implement. The committee is expected to submit the minutes of its meetings along with observations, suggestions, if any, and resolutions to the respective statutory committees for further processing the same at the deliberations. The Convener and the members of the committee shall undertake all the operations in coordination with the Heads of the departments and administrative office.

Composition of the committee:

A senior member of faculty as convener and few faculty members are appointed by the Principal. The convener is expected to undertake all the prime duties of the committee, namely conveningthe meetings, recording minutes, recording special observations and suggestions, if any, processing the data and obtaining ratification of the minutes, resolutions, observations, taking necessary steps for tabling the said documents for ratification by the statutory bodies etc.

Table: Members of the Grievance Redressal Committee

S.NO	NAMES	DESIGNATION
1.	DR SYED ABDUL SATTAR(PRINCIPAL)	CHAIRMAN
2.	MR. RAZA AHMED KHAN	CONVENER
3.	PROF. SYED FARRUKH ANWAR	MEMBER
4.	DR. MIR MOAZZAM ALI	MEMBER
5.	MR. NISAR AHMED	MEMBER
6.	DR.MOHAMMAD S QASEEM	MEMBER
7.	MS FIRDOUS REHANA	MEMBER
8.	MS. ZAHOORA ABID	MEMBER
9.	MS. SABIHA KHATOON	MEMBER
10.	MRS. SHARIYA TAKREEM	MEMBER
11.	MR. MOHAMMEED SADDAM HUSSAIN	MEMBER

Basic functions of the committee:

The following items fall under the purview of the committee. The committee is expected to extend its co-operation to the members of faculty and staff appointed or drafted for specific tasks from time to time like other members of faculty including heads of departments or non- teaching staff appointed or drafted by the principal for taking up a special enquiry related to any complaint, controller of examinations and other personnel drafted by the principal in case of an examination oriented grievance etc. The activities are classified in two categories planning, and monitoring & execution.

Planning activity:

Preparing the grievance redressal procedures from time to time and notifying the tenets to the

staff and students. Studying and compiling the relevant enactments of the Government of

Telangana and Government of India.

Identifying the relevant on-going litigations and keeping the institution abreast of different verdicts of the Local courts and higher courts

or tribunals or other legal bodies including Lokayukta and Human rights commission. Monitoring and Execution activity:

Receiving appeals from the students

and staff. Identifying the intensity of

the appeal.

Ascertaining the legal implications of the appeal.

Classification of appeals into academic, administrative and

discipline-oriented. Constitution of a separate committee in case

of need.

Ascertaining the provisions of the committee.

The committee may meet within 24 hours from the time of commencement of its operation and decide over the course of enquiry.
Ascertaining the individuals to be involved in the enquiry.

Submission of the report after deliberations among the members of the committee Based on the report, the action which is taken can be finalized.

In case of an appeal related to service matters, a committee shall be constituted to look into the verdicts of the tribunal of the

government regarding similar items and submitting a report to the management for further action. Grievance boxes were installed at

various locations.

Action taken

Some of the Grievances received and addressed are as follows Grievances Received

Administrative office should be spacious and more number of counters should be provided. Transport facilities

should be provided from nook and corner of the city.

Canteen should be opened bit early. Washrooms should be cleaned regularly. Sports time

duration should be increased. It is difficult to walk from CSE department to administration block

during the rainy season as it is muddy.

Grievances addressed

We constructed new administrative office with spacious as per the request made by students requirements.

Transportation facilities are extended to additional routes and stops as per the requests made by the students and the staff. Canteen is

opened one hour before the functioning of the classes.

Earlier, the scavengers were out sourced. Now, the management appointed permanent scavengers to clean the washrooms regularly.

Previously the sports were conducted only after the college timings. Now, it is included in regular class hours.

Earlier, the area between the CSE department and admin block was muddy.Now, floor tiles have been laid down. The college website has the link to the Grievance Redressal Cell as per the following URL http://www.nsakcet.ac.in/GrievenceRedresselCell (http://www.nsakcet.ac.in/GrievenceRedresselCell)

NAME:	HALL TICKET/ROLL NO:
COURSE STUDIED IN NSAKCET:	BRANCH:
ACADEMIC YEAR OF B.TECH:	ACADEMIC YEAR OF M.TECH:
PHONE NUMBER (WITH CODE) :	EMAIL:
SUBJECT:	

Anti-Ragging Committee

The institution has constituted anti – ragging committee to prevent ragging inside the institution premises and also to create awareness among the students so as to prevent the same from happeningoutside the campus. It has the Principal, HODs, faculty, senior students and parents.

Anti Ragging Committee

S.NO	NAMES	DESIGNATION
1.	DR SYED ABDUL SATTAR (PRINCIPAL)	CHAIRMAN
2.	DR AMARESH BABU	CONVENER
3.	PROF RAZA AHMED KHAN	MEMBER
4.	MR SYED SADAT ALI	MEMBER
5.	MR SHAIK MOHAMMED JAVID	MEMBER
6.	MR ZAKIR	MEMBER
7.	MR MD KHALEEL AHMED	MEMBER
8.	MR MD AYAZUDDIN	MEMBER
9.	MR DABEERULLAH	MEMBER
10.	MR. MOHAMMED ANAS ALI	MEMBER

Ragging means causing physical and / or mental trauma to a person as a result of physical abuse, manhandling, using abusive language or

gestures or forcing to perform acts that may cause physical/mental damage. Ragging is a social, cultural and psychological menace.

Students are urged to keep-up the glorious tradition of college and not to indulge in any activity within or outside the campus that may be construed as or amounts to ragging.

Any student, if found involved in any such activity directly or indirectly shall not only be expelled from the institution, but the matter will be reported to police / legal authorities, for further necessary action.

The institution has taken the following measures to prevent ragging

Anti-ragging committees involving teaching, Non-teaching staff and senior students are constituted. The campus is under

CCTV camera surveillance. Banners and posters on anti-ragging act are displayed at prominent places.

Complaint boxes at prominent places are arranged.

The telephone numbers of the college administration and police are displayed at prominent places.
Anti-ragging help line number and web site address are displayed in the campus at prominent places using which students can receive

assistance within 15 minutes. Awarenesson anti-ragging act is created to all the students by the Principal, HODs and senior faculty members in

each class.

Awareness on anti-ragging act is created to all the students with the involvement of judiciary, revenue and police department. Undertaking

forms are obtained from the studentsand their parents stating that senior students do not involve in ragging in any form. Separate seats/buses

are arranged for the first year students.

Lunch timings and class timings of the first year students are different from that of the senior students. Class rooms for first year students are arranged in a separate block.

Fresher's day is conducted within one month from the commencement of first year class work. The faculty members are deputed as hostel

committee members in order to havebetter vigilance.

All the students are issued ID cards and no outsiders are allowed into the hostel.

The implementation of the above measures resulted in; no incident of ragging has been happened till date in the campus. Our campus is ragging free campus.

Women's Grievance Cell

Women's Committee (Complaint Committee on Sexual Harassment)

Women Grievance Committee is formed for speedy redressal of any complaint or issues related to women staff. Examine complaints of sexual harassment or sexual discrimination pertaining to the female staff members and the female students. Take necessary remedial measures wherever possible or submit its findings with recommendationof principal. Following are the members of the Sexual Harassment Control Committee

Women's Grievance Cell

S. No.	Name	Position	Designation/Department
1	Dr. SYED ABDUL SATTAR, Principal	Chairman	Principal

2	Ms. PUSHPANJALI PATRA, IT DEPT	Convener	IT DEPT
3	Ms SABA FATHIMA ,CIVIL DEPT	Member	CIVIL DEPT
4	Ms SABIHA KHATOON, ENGLISH DEPT	Member	ENGLISH DEPT
5	Ms. AYESHA FATIMA, ECE DEPT	Member	ECE DEPT
6	Ms. SYEDA FARHATH BEGUM, CSE DEPT	Member	CSE DEPT
7	Ms. YASMEEN BANU, EEE DEPT	Member	EEE DEPT

Main responsibility of Women Grievance Committee is to ensure safe and healthy working environment for the female employees and the students, whereby they are protected against any kind of victimization and are always provided with environment which is free from fear and is conductive to progress and for discharging their duties.

The institution has taken the following measures to prevent sexual harassment. The campus is under CCTV camera surveillance.

The Suggestion boxes are kept at various locations in the campus to receive various difficulties uncounted by

Lady Staff and girlstudents. Conducted workshops and training programmes at regular intervals for sensitizing

the members.

By making awareness of the act and punishment for the sexual harassment of the women at workplace Act No 14 of 2013.

Due to these precautionary measures, no such an incident of women harassment has been happened till date in the campus.

iv. **Delegation of financial powers** (10) Institute Marks : 10.00

1. Delegation of financial powers (10)

Institution should explicitly mention financial powers delegated to the Principal, Heads of Departments and relevant in-charges. Demonstrate the utilization of financial powers for each year of the assessment years.

Budgets for running the institution and department are very essential. These are prepared by every department before the commencement of the academic year. In this regard, Heads of the Departments, with senior faculties give the requisition to the Principal with regard to stationery, lab requirements, etc, for which budget allocations are approved by the Principal in discussion with the Management.

On the same lines, proposals are sent to the Principal for procuring new equipment for the labs, interactive technologies in the classrooms, and conduction of workshops / conferences/seminars by the Heads of Departments for which fund allocations are made.

The following is the power delegated for Principal, HODs and others. For the approved limit they can take decision as per the policy. They can utilize this amount for maintenance, servicing of equipments, guest lectures, workshop etc. Account section will arrange for payment with the formal approval of Principal.

A. Financial Power Delegated

Table: Financial Powers Delegate and Utilization (2019-20)

S. No.	DESIGNATION	FINANCIAL POWER (In Rs.)
1.	Principal	50000
2.	HODs of Engineering Departments	10000
3.	HODs of Basic Sciences	10000

4.	Head- Library information center	5000

Table: Revised Financial Powers Delegate and Utilization (from 2020-21 assessment year)

S. No.	DESIGNATION	FINANCIAL POWER (In Rs.)
1.	Principal	60000
2.	HODs of Engineering Departments	15000
3.	HODs of Basic Sciences	15000
4.	Head- Library information center	6000

B. Utilization of financial power

S. No.	DESIGNATION	FINANCIAL POWER (In Rs.)	Assessment Years				
			2019-20	2018-19	2017-18	2016-17	2015-16
1.	Principal	50000	50000	50000	50000	50000	50000
2.	HODs of Engineering Departments	10000	10000	10000	10000	10000	10000
3.	HODs of Basic Sciences	10000	10000	10000	10000	10000	10000
4.	Head- Library information Center	5000	5000	5000	5000	5000	5000

S. No	DESIGNATION	FINANCIAL POWER (InRs.)	Assessment Years
			2020-21
1.	Principal	60000	60000
2.	HODs of Engineering Departments	15000	15000
3.	HODs of Basic Sciences	15000	15000
4.	Head- Library information Center	6000	6000

Utilization of financial power in percentage

S. No.	DESIGNATION	FINANCIALPOWER (InRs.)	Assessment Years									
			2019-20	%	2018-19	%	2017-18	%	2016-17	%	2015-16	%
1.	Principal	50000	50000	100	50000	100	50000	100	50000	100	50000	100
2.	HODs of Engineering Departments	10000	10000	100	10000	100	10000	100	10000	100	10000	100
3.	HODs of Basic Sciences	10000	10000	100	10000	100	10000	100	10000	100	10000	100
4.	Head- Library informationcenter	5000	5000	100	5000	100	5000	100	5000	100	5000	100

S. No.	DESIGNATION	FINANCIALPOWER (InRs.)	Assessment Years	
			2020-21	%
1.	Principal	60000	60000	100
2.	HODs of Engineering Departments	15000	15000	100
3.	HODs of Basic Sciences	15000	15000	100
4.	Head- Library information Center	6000	6000	100

v. **Transparency and availability of correct/unambiguous information in public domain** (5) Institute Marks : 5.00

1. College maintains transparency in all its operation and working. At the beginning of every semester, college brings out academic calendar that contains information of semester activities and the same is available in all the departments. Information on policies, rules, processes and its dissemination is made available to the stakeholders on the college website www.nsakcet.ac.in (http://www.nsakcet.ac.in) .
2. Dissemination and Availability of institute/program specific information through the web. All the specific information regarding students, faculty and staff is made available in the institution web site www.nsakcet.ac.in (http://www.nsakcet.ac.in) and in the college and departmental office as well.

b. **Budget Allocation, Utilization, and Public Accounting at Institute level** (30) Total Marks 30.00

10.2.2 Utilization of allocated funds (15) Institute Marks : 15.00

Funds are allocated by the Management of the College. Department Heads / Section-in-charges are intimated of the extent of funds allocated against their budget proposals. Major works like construction, up-gradation of existing infrastructure, procurement and maintenance of common utilities, house-keeping, procurement of furniture etc. are controlled directly by the Accounts officer. Actions for procurement of lab equipment, up-gradation of existing lab facilities, purchase of consumables etc. are initiated from the respective departments and the funds are released on a case by case basis from the accounts office of the college on approval by the Management. During the last three years, the budget was utilized to meet expenses such as staff salary, infrastructure development, purchase of equipment, expenses towards consumables and contingencies, travel etc. Almost 95% of the allocated budget provided by the management is effectively utilized by the institution for the last three years. The Table shows the percentage of funds utilization for the current financial year and for the last three years in institution level.

Table: Utilization of Allocated funds

S.No.	Assessment Year	Budget Allocated in Rs.	Actual Expenditure in Rs.	Percentage of Utilization
1	2020-21	**171900000**	**167001738**	97.15
2	2019-20	14,15,85,200	13,95,39,392	98.55
3	2018-19	10,85,50,000	10,58,79,722	97.54
4	2017-18	10,71,50,000	10,30,55,515	96.17
5	2016-17	11,20,75,000	11,13,63,265	99.36

10.2.3 Availability of the audited statements on the institute's website (5) Institute Marks : 5.00

Table: Availability of audited statements

Financial year	Availability	College Website
2020-2021	Yes	www.nsakcet.ac.in
2019-2020	Yes	www.nsakcet.ac.in
2018-2019	Yes	www.nsakcet.ac.in
2017-2018	Yes	www.nsakcet.ac.in
2016-2017	Yes	www.nsakcet.ac.in

Summary of current financial year's budget and actual expenditure incurred (for the institution exclusively) in the three previous financial years

Total Income at Institute level: For CFY, CFYm1, CFYm2 & CFYm3
CFY: (Current Financial Year),
CFYm1: (Current Financial Year minus 1),
CFYm2: (Current Financial Year minus 2) and
CFYm3: (Current Financial Year minus 3)

Table 1 - CFY 2020-21

Total Income:16,58,64,773				*Actual expenditure(till…):151,025,940*			Total No. Of Students:1526
Fee	Govt.	Grants	Other sources(specify) Transport	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
7,61,22,902	7,17,02,356	0	1,80,39515	102,480,711	48,545,229	-	98,968.55

Table 2 – CFYm1 2019-20

Total Income: 160951347				Actual expenditure(till…): 155578550			Total No. Of Students :1528
Fee	Govt.	Grants	Other sources(specify) Transport	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
48824825	78162875	0	33963647	94902915.5	60675634.5		101818.42

Table 2 - CFYm1 2018-19

Total Income 129071773				Actual expenditure(till…): 104898522			Total No. Of Students 1281
Fee	Govt.	Grants	Other sources(specify) Transport	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
42719749	68576000	0	17776024	64331939	40566583		81888.00

Table 3 - CFYm2 2017-18

Total Income 111208106				Actual expenditure(till…): 102294727			Total No. Of Students 995
Fee	Govt.	Grants	Other sources(specify) Transport	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
55660903	41038340	0	14508863	63251077	39043650		102808.77

Table 4 - **CFYm3 2016-17**

Total Income 112340398				Actual expenditure(till…): 109759326			Total No. Of Students 1214
Fee	Govt.	Grants	Other sources(specify) Transport	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student

56921035	41606774	0	13812589	58100346	51658980		90411.31

Table 5 – CFYm4 2015-16

Total Income 102273994				Actual expenditure(till…): 90494212			Total No. Of Students 1413
Fee	Govt.	Grants	Other sources(specify) Transport	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
57167614	31638717	0	13467663	50379812	40114400		64044.03

Items	Budget in 2020-2021 (Rs)	Expenditure in 2020-2021 (Rs)	Budget in 2019-2020 (Rs)	Expenditure in 2019-2020 (Rs)	Budget in 2018-2019 (Rs)	Expenditure in 2018-2019 (Rs)	Budget in 2017-2018 (Rs)	Expenditure in 2017-2018(Rs)	Budget in 2016-2017 (Rs)	Expenditure in 2016-2017 (Rs)
Infrastructure built up	13320000	12400998	11,100,000	10,334,165	8,500,000	8,484,059	6,000,000	5,808,155	8,000,000	7,983,658
Library	1068000	1049708	890,000	874757	1,000,000	721550	900,000	887472	900,000	900,000
Laboratory Equipment	3240000	3214800	2,700,000	2,679,000	2,550,000	2,534,000	3,300,000	2,066,603	4,300,000	4,292,981
Laboratory Consumables	2700000	2657700	2,250,000	2,214,750	1,525,000	1,519,233	1,400,000	1,360,088	850,000	833,609
Teaching and Non-Teaching Staff salaries	87000000	87523200	72,500,000	72,936,000	65,000,000	62,610,704	65,000,000	62,578,136	57,500,000	57,007,216
Maintenance and Spares	1158000	1151653	965,460	959,711	600,000	548,964	590,000	589,412	6,950,000	6,914,700
Software	420000	360000	685,400	671,277	530,000	444,799	699,000	580,698	4,600,000	4,563,400
R&D	1590000	1572000	1,325,000	1,310,000	1,225,000	1,212,000	1,025,000	1,023,500	1,025,000	1,001,400
Training & Travel	312000	292978	260,000	244,148	500,000	472,500	450,000	426,030	800,000	755,175
Miscellaneous Expenses	492000	471976	410,000	393,313	500,000	476,754	250,000	232,200	100,000	80,427
Others Specify #	60600000	56306725	48,189,140	46,922,271	26,620,000	26,855,159	27,536,000	27,503,221	27,050,000	27,030,699
Total	**171900000**	**167001738**	**141,275,000**	**139,539,392**	**108,550,000**	**105,879,722**	**107,150,000**	**103,055,515**	**112,075,000**	**111,363,265**

10.2.1 Adequacy of budget allocation (10)

Institute Marks : 10.00

The yearly budget is prepared according to the needs & requirements of the departments taking into consideration of annual intake of students, laboratory & infrastructure developments. Students,faculty & staff requirements and promotions and latest technologies etc.,Formal budget estimates will be prepared by each department and will be reviewed in HODs meeting with the Principal andthe Secretary.

After deliberations formal budget made altered in departments and forwarded to Principal for preparing final budget at college level. The final budget is sent to Management for approval and sanction. The Management is approving almost 100% which was proposed bythe institute. The budget allocation and utilization for the last three years is adequate. The Table shows the details of adequacy of budget allocation for the current financial year and for the last three years in institutional level.

Table: Budget allocation- Actual expenditure- Adequate/Inadequate

S.No.	Assessment Year	Budget Allocated inRs.	Actual Expenditure in Rs.	Adequate/Inadequate
1	2020-21	**171900000**	**167001738**	Adequate
2	2019-20	14,15,85,200	13,95,39,392	Adequate
3	2018-19	10,85,50,000	10,58,79,722	Adequate
4	2017-18	10,71,50,000	10,30,55,515	Adequate
5	2016-17	11,20,75,000	11,13,63,265	Adequate

c. **Program Specific Budget Allocation, Utilization** (30) Total Marks 30.00

i. **Adequacy of budget allocation** (10) Institute Marks : 10.00

The allocated budget was used to meet the new facilities for equipment, replacement of outdated equipment and new labs due to revision in syllabi. Budget requirements under recurring and non- recurring heads are collected from every departments and sections before the commencement of the financial year. Allocations are made as per the availability of funds. Spending is monitored by the accounts section. The institution carefully monitors the expenses so that the necessities are met without affecting the smooth working of the institution. The management has been very efficiently doing this over the past several years that the institution never had any serious budget crunch that affected the functioning of the college. The Table shows the details of adequacy of budget allocation for the current financial year and for the last three years for the **Department of Mechanical Engineering.**

1. **Quantum of budget allocation for three years**

Budget tables will be given here

Table: Adequacy of budget allocation

S.No.	Assessment Year	Budget Allocated in Rs.	Actual Expenditure in Rs.	Adequate/Inadequate
1	2020-21	39537000	38410400	Adequate
2	2019-20	3,24,93,250	3,20,94,060	Adequate
3	2018-19	2,49,66,500	2,43,52,336	Adequate
4	2017-18	2,46,44,500	2,37,02,768	Adequate
5	2016-17	3,60,95,000	2,37,02,768	Adequate

2. **Justification of budget allocated for three years**

The budget proposals for every academic year are prepared by the departments and submit to the college finance committee. The committee after through justification allocates the required budget to specific department.

The planning and finance committee carefully monitors the expenses so that the necessities are met without affecting the smooth working of the institution.

The management has been very efficiently providing sufficient budget over the past several years that the institution never had any serious budget crunch that affected the functioning of the college. The Table shows the details of adequacy of budget allocation for thecurrent financial year and for the last three years for the department of **Mechanical Engineering.**

Institute Marks :

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3CFY:
(Current FinancialYear),
CFYm1 : (Current Financial Year minus 1), CFYm2 : (Current Financial Year minus 2) andCFYm3 : (Current Financial Year minus 3)

Table 1:: CFY 2020-21

Budget: **39537000**		Actual expenditure (till…): **38410400**		Total No. Of Students:
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
23722200	7907400	7682080	23046240	

Table 2 :: CFY 2019-20

BUDGET: **32,493,250**		Actual expenditure (till…): **32,094,060**		Total No. Of Students : 343
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
6498650	19495950	6418812	19256436	93,568.68

Table 3 :: CFY 2018-19

BUDGET: **24,966,500**		Actual expenditure (till…):**24,352,336**		Total No. Of Students : 360
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
4993300	14979900	4870467	14611401.6	67,645.37

Table 4:: CFYm1 2017-18

BUDGET: **24,644,500**		Actual expenditure (till…):**23,702,768**		Total No. Of Students :374
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
4928900	14786700	4740554	14221660.8	63,376.38

Table 5 :: CFYm2 2016-17

BUDGET: **25,777,250**		Actual expenditure (till…):**25,613,551**		Total No. Of Students : 396
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
5155450	15466350	5122710	15368130.6	64,680.68

Items	Budget in 2020-2021 (Rs)	Expenditure in 2020-2021 (Rs)	Budget in 2019-2020 (Rs)	Expenditure in 2019-2020 (Rs)	Budget in 2018-2019 (Rs)	Expenditure in 2018-2019 (Rs)	Budget in 2017-2018 (Rs)	Expenditure in 2017-2018 (Rs)	Budget in 2016-2017 (Rs)	Expenditure in 2016-2017(Rs)
Infrastructure built up	3063600	2852230	2,553,000	2,376,858	1,955,000	1,951,334	1,380,000	1,335,876	1,840,000	1,836,241
Library	245640	241433	204,700	201,194	230,000	165,957	207,000	204,119	207,000	207,000
Laboratory Equipment	745200	739404	621,000	616,170	586,500	582,820	759,000	475,319	989,000	987,386
Laboratory Consumables	621000	611271	517,500	509,393	350,750	349,424	322,000	312,820	195,500	191,730
Teaching and Non-Teaching Staff salaries	20010000	20130336	16,675,000	16,775,280	14,950,000	14,400,462	14,950,000	14,392,971	13,225,000	13,111,660
Maintenance and Spares	266340	264880	222,056	220,734	138,000	126,262	135,700	135,565	1,598,500	1,590,381
Software	210000	180000	342,700	335,639	265,000	222,400	349,500	290,349	1,058,000	1,049,582
R&D	365700	361560	304,750	301,300	281,750	278,760	235,750	235,405	235,750	230,322
Training & Travel	71760	67385	59,800	56,154	115,000	108,675	103,500	97,987	184,000	173,690
Miscellaneous Expenses	113160	108554	94,300	90,462	115,000	109,653	57,500	53,406	23,000	18,498
Others Specify #	13824600	12853347	11,083,502	10,792,122	6,122,600	6,176,687	6,333,280	6,325,741	6,221,500	6,217,061
Total	**39537000**	**38410400**	**32,493,250**	**32,094,060**	**24,966,500**	**24,352,336**	**24,644,500**	**23,702,768**	**25,777,250**	**25,613,551**

ii. **Utilization of allocated funds** (20) Institute Marks : 20.00

Funds are allocated by the Management of the College. Department Heads are intimated of the extent of funds allocated against their budget proposals. Actions for procurement of lab equipment, up- gradation of existing lab facilities, purchase of consumables, etc. areinitiated from the department and the funds are released on a case by case basis from the accounts office of the college on approval by the Management. During the last three years, the budget was utilized to meet expenses like purchase of equipment, expenses towards consumables and contingencies, etc. The Table shows the percentage of funds utilization for the current financial year and for the last three years for the **Department of Mechanical Engineering.**

Table: Utilization of allocated funds

S.No.	Assessment Year	Budget Allocated in Rs.	Actual Expenditure in Rs.	Percentage ofUtilization
1	2020-21	**39537000**	**38410400**	97.15
2	2019-20	**3,24,93,250**	**3,20,94,060**	98.7
3	2018-19	**2,49,66,500**	**2,43,52,336**	97.5
4	2017-18	**2,46,44,500**	**2,37,02,768**	96.3
5	2016-17	3,60,95,000	2,37,02,768	65.66

d. **Library and Internet** (20) Total Marks 20.00

i. **Quality of learning resources (hard/soft)** (10)
Institute Marks :10.00

10.4.1 Quality of learning resources

The college has a computerized Central Library which is well equipped with a large collection of books under the categories of academics, reference and general. All the books are automated using the latest library management software to improve the efficiency of library housekeeping operations and provide speed service to the users. It is also collaborated with national information network agencies like DELNET, and provided Internet and Wi-Fi facility to access the required information.

The library also subscribes to both national and international magazines, journals and periodicals in addition to procuring leading national dailies. It is a book house of knowledge, where its prime motto is to guide every student in an appropriate way and pave the road to acquiring knowledge and thereby success. A student book bank is maintained in the library for greater benefit of the students.

The college has a perennial code library management system (LMS).

The following **Table 10.4.1** provides the details of library

S.No	Item	Quantity
1	Carpet Area of library (in m2)	420 sq.m
2	Reading Space (in m2)	150 sq.m
3	Number of Seats in reading space	150
4	Number of Users (Issue Book) per day	80
5	Number of Users (Reading Space) per day	120
6	Timings: On Working Days	8:30 AM to 5:30 PM
	Timings: On Weekend	8.30 AM to 6:00 PM
	Timings: On Holidays / Vacation	9.00 AM to 4:20 PM
7	Number of Library Staff	03
8	Number of Library Staff with degree in Lib. Mgmt.	02
9	Computerization for search, indexing, issue/return records	Yes
10	Bar Coding Used?	Yes
11	Library Services on Internet/Intranet	Yes
12	INDEST / DELNET and other similar membership?	DELNET

The institute believes that self-learning and learning beyond syllabus have a great scope in the development of the career of an engineer. There is much to learn beyond the academic curriculum, to meet the Industry needs. This fact calls for the relevance of self-learning for young engineers. To cater to the growing needs of research and self-learning the institute has provided adequate facilities to make the users innovative and inventive. Motivation and Initiation for the same is provided by the faculty and encourage them to do things on their own so that they gain self-confidenceand hands on experience in various projects. In this connection, the institute has provided the following facilities to the students to think outside the scope.

- Internet access with Wi-Fi connectivity
- Smart classrooms /Laboratories with audio
- visual aids Language lab, Computer Laboratories etc.

Learning resources:

- Online database and digital videos like (NPTEL Videos).

The Central Library is kept open beyond working hours for benefit of students as well as faculty.

The institute has a state of the art library with reprographic facilities and also includes a digital library.

The college has information resource center (Library and Digital Library) to cater to the needs of researchers.

- A Central library with well stocked books and journals suitable for research. E-journals and a large collection of e-books.
- Thirty high performance PC's with high speed internet access for digital librar users.

COLLECTION:

Library is having a rich collection comprising of Monographs (books), Reference books, Journals. (Both Indian and Foreign) The following is an exhaustive list of books **(Dept. / Branch / Subject wise Break up)** available in the library**.**

BOOKS/JOURNALS – 2020-21

The below table gives the details of :

S.NO	COURSE	DEPT / BRANCH	TITLES	VOLUMES	INDIAN /FOREIGN JOURNALS	ON-LINE JOURNALS
1	BE, B .Tech	CIVIL	505	3252	INDIAN JOURNALS:-72 INTERNATIONAL JOURNALS :-24	DELNET (DOWNLOADS, E-JOURNALS: 266) NDL, SWAYAM,NPTEL - DOWNLOAD VIDEOS : 108
2		EEE	414	2726		
3		ME	362	3083		
4		ECE	517	2870		
5		CSE	1499	4328		
6		IT	333	2761		
		H&S	481	4577		
		TOTAL (UG)	4111	23597		
1	M .Tech	CIVIL (STRUC.)	107	638		
2		MECH (HVAC)	91	455		
3		ECE (EBEDED SYSTEMS)	105	325		
4		CSE (COMPUTER SCI.)	172	597		
		TOTAL (PG)	475	2015		

In addition to the above, the library has also received many timeless books/monographs as gift from the Principal and Philanthropists. In addition to the above, the

library also subscribes to **10 Newspapers**

Total number of titles and volumes for UG:

Year	Number of titles	Number of volumes
2017-18	3107	15823
2018-19	3373	17279
2019-20	3417	17655
2020-21	4111	23597

Number of books for HNS Department:

Year	Number of new titles added	Number of new volumes Added
2017-18	302	3735
2018-19	348	3998
2019-20	416	4140
2020-21	481	4577

Number of books/journals for Civil Department:

Year	Number of new titles added	Number of new volumes added
2017-18	416	2771
2018-19	470	3005
2019-20	479	3054
2020-21	505	3252

Number of books/journals for Mechanical Department:

Year	Number of new titles added	Number of new volumes added
2017-18	266	2561
2018-19	317	2797
2019-20	328	2855
2020-21	362	3083

Number of books/journals for EEE Department:

Year	Number of new titles added	Number of new volumes added
	400	2378
	402	2613
	407	2676
	414	2726

Number of books/journals for ECE Department:

Year	Number of new titles added	Number of new volumes added
2017-18	420	2319
2018-19	472	2546
2019-20	480	2627
2020-21	517	2870

Number of books/journals for CSE Department:

Year	Number of new titles added	Number of new volumes added

2017-18	1378	3714
2018-19	1431	3977
2019-20	1435	4002
2020-21	1499	4328

Number of books/journals for IT Department:

Year	Number of new titles added	Number of new volumes added
2017-18	227	2080
2018-19	281	2341
2019-20	288	2441
2020-21	333	2761

Accessibility to students:

The information resources available in the Central Library are:

- Titles
- Reference books o Back Volumes o Volumes
- News Papers
- Project Reports
- National Programme Technology Enhanced Learning (NPTEL) video lectures o Working Hours
- Print Journals o Journals
- Magazines

Support to students for self-learning activities :

Details of Digital Library:

The users can access the digital resources by using updated web

browsers by using thebelow URL in the campus network: Ø

http://164.100.247.26/delnet

e-Sources:

- NPTEL can be accessed through digital library using the URL:http://ndl.iitkgp.ac.in/ (http://nptel.iitm.ac.in/)
- CoEeRD (Centre of Excellence for e-Resource Development and Deployment) are kept available and can be accessed using

URL: http://jntuk-coeerd.in/

Also, every department has its own library with limited number of prescribed and referral volumes.

A.	**Digital Library**	**10 Pcs**
B.	**Reprographic Facilities**	**YES**
C.	**Printer Facilities**	**YES**
D.	**Scanner Facilities**	**YES**
E.	**Working Hours of Library**	**8:30 AM – 5:30 PM**
F.	**Seating Capacity**	**150**
G.	**Total Area of Library**	**420 Sq.m**

10.4.2 Internet (10) Institute Marks : 10.00

Name of the Internet provider	ACT FIBER NET
Available band width	1. 300 MBPS G-Block, 2. 300 MBPS exam branch, 3. 150 mbps admin block, 4. 300 mbps c block
WiFi availability	YES
Internet access in labs, classrooms, library and offices of all Departments etc	YES
Security arrangements	YES

Annexure I

(A) PROGRAM OUTCOME (POs)

Engineering Graduates will be able to:

1. **Engineering Knowledge :** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

(B) PROGRAM SPECIFIC OUTCOME (PSOs)

PSO1	Develop a sound understanding of the concepts and the operational aspects of computer systems.
PSO2	Apply ethical software development practices in providing real time solutions using latest development tools.
PSO3	Demonstrate their adaptability to the ever evolving societal needs in multidisciplinary fields.

Declaration

The head of the institution needs to make a declaration as per the format given -

- I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines in force as on date and the institutes hall fully abide by them. It is submitted that information provided in

Head of the Institute

Name : DR. SYED ABDUL SATTAR

Designation :

PRINCIPAL

Signature :

Seal of The Institution :

Place : Hyderabad

Date : 06-04-2021 23:34:57