



Koneru Lakshmaiah Education Foundation
(Category - I, Deemed to be University established by the UGC, 1986)

Campus: Green Fields, Vaddeswaram, Guntur District, Andhra Pradesh
Phone No: +91 8645 350 260, www.kldeu.ac.in, www.kldeu.org
Admission Office: 2nd Floor, Main Building, Vaddeswaram, Guntur District, Andhra Pradesh

XXXXVI Academic Council

Department of Mechanical Engineering

30th BOS meeting minutes

Minutes of the 30th BOS meeting-Mechanical Department held on 12-12-2025 in Hybrid mode in room no.M118(HOD Chamber) from 4:00 pm onwards.

Following is the link for the meeting

<https://teams.live.com/join/9351638743897?p=9cmfYYY5sk1fJ8c1m9>

The following members were present

1. Dr.T.Vijaya Kumar, Associate Professor, HOD-ME & Chairman BOS
2. Dr.B.Nageswara Rao, Professor
3. Dr. A.Jagadeesh, Director-FED, Professor-ME
4. Dr. A.Srinath, Dean Skill Development & progression
5. Dr. D.V.A. Rama Sastry, Associate professor
6. Dr.S.N.Padhi, Professor, Group Head-Design & Manufacturing
7. Dr.S.S.Rao, Professor, Group Head-Smart Manufacturing
8. Dr.G.Yedukondalu, Associate Professor, associate Dean Skill Development & Progression
9. Dr. P. Kasi V Rao, Associate Professor, Associate Dean Academics
10. Dr.K.V.Durga Rajesh, Associate Professor, Deputy HOD
11. Dr.P.N.V.Bala Subrahmanyam, Associate Professor, HOD-BES-II
12. Dr .T. Kanthimathi, Assistant Professor, Professor I/C Academics
13. Dr.A.Venu Gopal, Professor & Dean Academics, NIT Warangal
14. Dr. P. Srinivasa Rao, Global Training Head, Cyient Technologies, Hyderabad

BOS Chairman welcomed the members and presented the Agenda items for the meeting

Agenda item:1

Agenda: To present the significant events of the department from July 2025 to till date

Resolution: BOS members appreciated the achievements of the department

Chairman BOS presented the following significant events of the department from July 2025 to till date.

Honours Received by Faculty:

- Dr.G.Murali, Professor received International Outstanding Researcher award by "SCOPUS INDEX CONCLAVE 2025:" an International Research Congress" powered by Asia Research award.

Dr. V. RAJESH
PRINCIPAL

College of Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, VADDESWARAM-522 302 (Deemed to be University)
Guntur District, Andhra Pradesh

Dr. T. VIJAYA KUMAR

HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, VADDESWARAM-522 302.

12/12/25



Koneru Lakshmaiah Education Foundation

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- Dr.B.Nageswara Rao, Professor, Dr.Priyaranjan Samal Assistant Professor and Dr Atul Bhattad Assistant Professor, Were listed as top 2% most cited Scientists for the year 2025.
- Dr.B.Nageswara Rao, Professor received Certificate of Excellence as a token of appreciation for outstanding contribution to engineering education and research for gracing the World Standards Day 2025 as the Chief Guest and Keynote Speaker, by The Institution of Engineers (India), Andhra Pradesh State Center.

Placement Details:

- Mr.Chandu Naidu (2200079007-IV year B.Tech Student), is placed in Porite Corporation (Japanese Company) with a Pay Package of 28 LPA.
- Mr.D.Nanda Kishore (2200079026- IV year B.Tech Student), is placed in Tiger Machines Co. Ltd (Japanese Company) with a Pay Package of 27.08 LPA.
- 12 students of IV Year B.Tech got placed in KYB Corporation, Japanese automotive company with a pay package of 3.36 LPA.
- Mr.K.V.Sai Siva Kushmit (2300070031-III Year B.Tech Student) is placed in AUTOPIA (Japanese Company) with a CTC of 20 LPA.
- Mr.S.Akhil (2300070006-III Year B.tech Student) placed in AUTOBACS (Japanese Company) with a CTC of 20 LPA.

Ph.D Awarded:

S. No.	Dept.	Name of the Faculty/Scholar	Name of the Supervisor	Month and Year
1	ME	Asalekar Amol Jagannath	Dr. D. V. A Rama Sastry	July - 2025
2	ME	Sunkara Ramesh Kumar	Dr. V. Srikanth	July - 2025
3	ME	S. Sarveswara Reddy	Dr. K. V. Durga Rajesh	August - 2025
4	ME	Bullibabu Kancharla	Dr. G. Diwakar	September-2025
5	ME	K. Rajesh Kumar	Dr. T. Vijaya Kumar	September-2025
6	ME	M. Sandeep	Dr. T. Vijaya Kumar	September-2025
7	ME	G. Deepika Reddy	Dr. M. Nageswara Rao	November-2025

Vijaya Kumar
Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
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Green Fields, VADESWARAM-522 302, 12/12/23



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NSS Activities conducted through Virtual Mode

S. No.	Dept.	Details of NSS Activities	Conducted On
1	ME	"Swachhata Hi Seva" campaign, KL University's National Service Scheme (NSS) in collaboration with the Mangalagiri-Tadepalli Municipal Corporation organized a cleanliness drive on Thursday (25-09-2025) at Seethanagaram Ghat in Tadepalli Mandal.	25-09-2025
2	ME	DAAN UTSAV, celebrated on the eve of Sardar Vallabhbhai Patel's 150th Birth Anniversary on 01-11-2025 at Upper Primary School, Gundimeda Village.	01-11-2025



Agenda item:2

Agenda: To approve the DAC resolutions conducted on 06-12-2025.

Resolution: It is resolved to approve the DAC resolutions and recommend the same to the academic council for further approval.

Chairman BOS presented the following deliberations on Stakeholders feedback and Course Coordinator's recommendations made at the DAC meeting, which was held on 06-12-2025.

- Dr.A.Srinath, Course Coordinator of 23ME04EF-Mechatronics & Robotics Course which is offered under HEC category recommended to modify the syllabus of the course by including the latest concepts. It was resolved to approve the modifications in the syllabus.
- Dr.D.V.A.Rama Sastry, Course Coordinator of 23SMF3304R and 23SMF3304A-Sustainable Design and Social Innovation in Smart Manufacturing Courses, which is offered under PE-3 category, suggested modifications in the syllabi of both courses since the L-T-P-S of the course is changed from 2-0-2-4 to 3-0-2-4 in Regular mode and 4-0-4-4 in Advanced mode. It is resolved to approve the syllabus modifications of the course in both regular and advanced mode.
- Dr.P.V.Chalapathi, Course Coordinator of OEME0004-Total quality Management, offered under Open elective category, recommended modifications in syllabus to

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update the topics as per industry requirements. It is resolved to approve the modifications in the syllabus.

- Dr.K.V.Durga Rajesh, Course Coordinator of 23SMF3203-Modern Manufacturing Processes offered as PE-2, recommended to change the CO statements of the course as the statements were not appropriate for the syllabus content. It is resolved to modify the CO statement of the course.
- Dr. B.Kiran Kumar Course Coordinator of Reverse Engineering and Rapid Prototyping course requested to recondition the CMM equipment and to provide 3D scanner in FabLab, so that students can do physical experiments on these experiments to attain practical knowledge. It is resolved to consider the faculty request and raise the issue to the concerned authority.
- Dr.T.Kanthimathi, Course Coordinator of Fluid Mechanics and Hydraulic Machines course, requested to provide one tutorial session to the course, so that students will get more practice time for solving the problems. It is resolved to recommend the modification in L-T-P-S of the course for Y26 regulation.

It is resolved to approve the feedback of stakeholders and course coordinators and the same is recommended to the academic council for further approval.

Detailed stake holders feedback and action taken report is given in **Annexure-1**.

The DAC meeting minutes are given in **Annexure-2**.

Detailed recommendations of syllabus revision is given in **Annexure-3**.

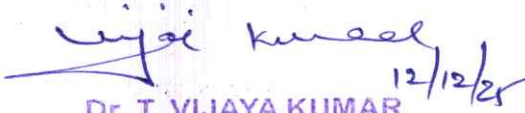
Agenda item:3

Agenda: To discuss and approve the amendments in the degree requirements of Y22 batch students	Resolution: It is resolved to approve the amendments in the degree requirements of Y22 batch students and recommend the same to the academic council for further approval.
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Chairman BOS presented the following amendments to Y22 degree requirements.

Credit Requirement under PEC Category for B.Tech (Honors) with Specialization:

- As per the Y22 Academic Flexibilities requirement, students opting for B.Tech (Honors) with Specialization are required to earn **22 credits** under the Professional Elective Courses (PEC) category.
- But they earned only **21 credits**, since the PE-4 course was offered in Regular mode (3 credits) instead of MOOCs mode (4 credits) due to academic and operational constraints. It is proposed that the **deficient 1 credit** may be permitted to be accommodated under the PCC category.


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Credit Requirement under Professional Core (PCC) Category for B.Tech (Honors) with Specialization:

- Students pursuing B.Tech (Honors) with Specialization are required to earn 14 additional credits under the PCC category. Due to academic and operational constraints, only 8 extra credits were obtained under this category.
- This deficit is covered by offering 2 Courses Power Plant Systems Engineering (L-T-P-S:3-0-0-0) and Robotics and Control: Theory and Practice (L-T-P-S:4-0-0-0) in MOOC's mode under PCC category to the students.

Publication Requirement for B.Tech (Honors) with Specialization:

- The current outcome requirement mandates students to publish one Scopus-indexed conference paper and one Scopus indexed journal paper. Due to the limited timelines dual publication requirement is difficult to the students to achieve.
- Therefore it is recommended to have only an one publication either a Scopus -indexed conference paper or Scopus/WoS- indexed journal paper.

Audit course Requirement for all Flexibilities:

- As per the current Outcome requirement students are required to complete 8 Audit courses(Audit Core: 4 and Audit Career Enhancement:4), But Since many of the Non-CRT students were able to complete 4 Audit core courses a and only 2 Audit Career Courses, it was proposed to reduce the min no. of audit courses to 7 instead of 8.

Minimum Credit Requirements for the flexibilities offered by the Department (Y22 Regulation)

- Y22 Regulation: B.Tech-ME : **168 Credits**
- Y22 Regulation: B.Tech- ME with Honors: **188 Credits**
- Y22 Regulation: B.Tech-ME with Specialization: **173 Credits**
- Y22 Regulation: B.Tech (Lateral Entry) with Specialization: **134 Credits**
- Y22 Regulation: B.Tech Honors with Specilaization:**198 Credits**

It is resolved to approve the amendments in Y22 degree requirements and recommend the same to the academic council.

Detailed Exit requirements of Y22 regulation is given in **Annexure-4**.


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Agenda item:4

Agenda: To discuss and approve the request of Mr.N.Praveen Kumar (170070255) to complete his degree

Resolution: It is resolved to approve the request of Y17 batch student Mr.N.Praveen Kumar, and the same is recommended to academic council for further approval.

- Mr. N.Praveen Kumar (ID.No.170070255) of Y17 Batch has requested permission to complete his degree as his 8 year tenure is completed. Student is having one backlog - 17ME3219-Design and Manufacturing-II.

It is resolved to approve the request of the student and to recommend the same to the academic council for further approval.

Request letter of the student is given in **Annexure-5**.

Meeting Photos:

DEPARTMENT OF MECHANICAL ENGINEERING

Welcomes All members to
30th Board of Studies meeting
12-12-2025

AGENDA ITEMS

- To present the significant events of the 2025-26 Odd Sem
- To approve the resolutions made by DAC held on 06-12-2025 and to recommend the same to the academic council
- To approve the amendments made to the degree requirements of Y22 admitted batch and recommend the same to the academic council.
- To consider and approve the request of Y17 batch student Mr.N.Praveen Kumar (170070255) to complete his degree, and to recommend the same to Academic Council for further approval.
- To discuss any other points with the permission of the chair

Vijaya Kumar
12/12/25
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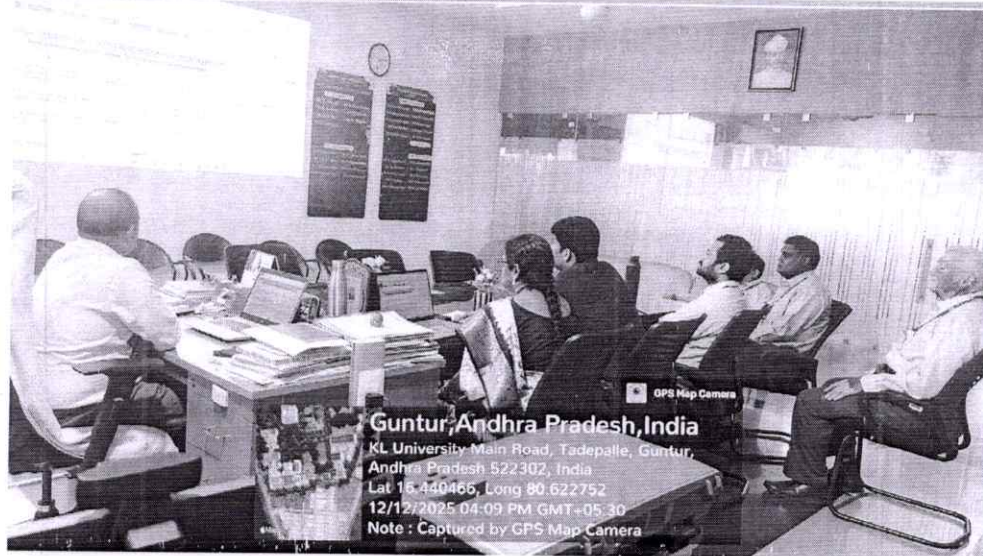
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Guntur, Andhra Pradesh, India

KL University Main Road, Tadepalle, Guntur,

Andhra Pradesh 522302, India

Lat 16.440466, Long 80.622752

12/12/2025 04:09 PM GMT+05:30

Note : Captured by GPS Map Camera

[Signature] 12/12/25

Professor I/C Academics

[Signature] 12/12/25
Chairman-BOS

HOD-ME

Dr. T. VIJAYA KUMAR

HOD-Mechanical Engineering

Koneru Lakshmaiah Education Foundation

(Deemed to be University)

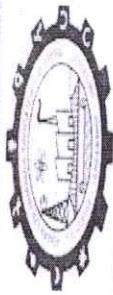
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BOS Meeting Signature

Date: 12-12-2025

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DEPARTMENT OF MECHANICAL ENGINEERING

Stake Holder Feedback Analysis and Action Taken Report Academic Year: 2025-26 Even Sem

S.No	Stake Holders	Count
1	Academic Peers	5
2	Alumni	4
3	Faculty	13
4	Industry personnel	10
5	Parents	2
6	Students	92
	Total	126

Academic Peers

Sl.No.	Department	Name of the Programme	Details of Stake Holder	Recommendations / Suggestion(s)	Analysis	Action Taken	DAC No.	Pg No.	Date	BOS NO.	Pg No.	Date
1												

Alumni

Sl.No.	Department	Name of the Programme	Details of Stake Holder	Recommendations / Suggestion(s)	Analysis	Action Taken	DAC No.	Pg No.	Date	BOS NO.	Pg No.	Date
1												

Faculty

Sl.No.	Department	Name of the Programme	Details of Stake Holder	Recommendations / Suggestion(s)	Analysis	Action Taken	DAC No.	Pg No.	Date	BOS NO.	Pg No.	Date
1	ME	B.Tech	Dr.A.Srinath, Professor	Recommended to change the syllabus of Mechatronics and Robotics course offered to Y23 admitted batch Honors through Experiential learning students	In order to meet the present industry requirements, modification in the syllabus is made	It is resolved to approve the modification of syllabus for Mechatronics and Robotics course	29	2	06-12-2025	30	4	12-12-2025
2	ME	B.Tech	Dr.D.V.A.Rama Sastry, Associate Professor	Recommended to revise the syllabus of 23SMF3304 s): Sustainable Design and Social Innovation in Smart Manufacturing course as the L-T-P-S of the course is changed to 3-0-2-4 instead of 2-0-2-4 (Y22 Batch)	Since the L-T-P-S is changed syllabus change is required	It is resolved to modify the syllabus of 23SMF3304 course as suggested by the faculty	29	2	06-12-2025	30	4	12-12-2025
3	ME	B.Tech	Dr.P.V.Chalapathi, Professor	Recommended to revise the syllabus of OEME0004: Total Quality Management course to meet the present industry requirements.	In order to meet the present industry requirements, modification in the syllabus is made	It is resolved to revise the syllabus of Total quality Management as per the recommendation of Faculty	29	2	06-12-2025	30	4	12-12-2025

Vijai Kumar
12/12/25

Dr. T. VISAYA KUMAR
HOD-Mechanical Engineering
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Sl.No.	Department	Name of the Programme	Details of Stake Holder	Recommendations / Suggestion(s)	Analysis	Action Taken	DAC No.	Pg No.	Date	BOS NO.	Pg No.	Date
4	ME	B.Tech	Dr. T. Kanthimathi, Assistant Professor	Recommended to add tutorial session to the Fluid Mechanics and Hydraulic Machines course because in this course students need to solve more number of problems, which they cannot do on their own	Tutorial session will give flexibility to solve more number of problems in the guidance of faculty	It is resolved to recommend the suggestion given by the faculty to the BOS, so that the change in the structure can be implemented to Y2 admitted batch students	29	3	06-12-2025	30	5	12-12-2025
5	ME	B.Tech	Dr. K.V. Durga Rajesh, Associate Professor	Recommended to change the CO statements of the course Modern Manufacturing Processes to be offered to Y23 batch students as PE-2 with an L-T-P-S-3-0-0-0, since the CO statement were not appropriate to the syllabus	It is necessary to change the CO statements as per the syllabus	It is resolved to approve and recommend the modifications of the CO statements to the BOS for further approval.	29	2	06-12-2025	30	5	12-12-2025
6	ME	B.Tech	Dr. B. Kiran Kumar, Associate professor	Recommended to recondition the CMM equipment and to add 3D scanner software in FAB lab for the course 23SMF3304-Reverse Engineering and Rapid Prototyping, so that students can do physical experiments since they are doing it as demo experiments	Students will understand better by doing Physical experiments	It is resolved to put forth the requisition of the faculty to the concerned authority for necessary action.	29	3	06-12-2025	30	5	12-12-2025

Industry Personnel

Sl.No.	Department	Name of the Programme	Details of Stake Holder	Recommendations / Suggestion(s)	Analysis	Action Taken	DAC No.	Pg No.	Date	BOS NO.	Pg No.	Date
1	ME	B.Tech										

Parent

Sl.No.	Department	Name of the Programme	Details of Stake Holder	Recommendations / Suggestion(s)	Analysis	Action Taken	DAC No.	Pg No.	Date	BOS NO.	Pg No.	Date
1	ME	B.Tech										

Student

Sl.No.	Department	Name of the Programme	Details of Stake Holder	Recommendations / Suggestion(s)	Analysis	Action Taken	DAC No.	Pg No.	Date	BOS NO.	Pg No.	Date
1	ME	M.Tech	Mr. B. Uday Shankar (2301130006), M.Tech-MD I year	Requested to provide physical lab for Mechanics of Composite Materials course for fabrication.	Physical Lab gives more insight to the students	It is resolved to put forth the proposal to the concerned authorities for the establishment of the lab	29	2	06-12-2025	30	5	12-12-2025
2	ME	M.Tech	Mr. D. Sai Ganesh (2301130001), M.Tech-MD I year	Requested to allow for the internships.	Internship will give practical exposure to the students	Dr. S. N. Padhi, explained to the student, that they will be allowed to do the internships in their II year of study.	29	2	06-12-2025	30	5	12-12-2025

Vijaya Kumar
HOD-ME 12/12/25

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K L E F

DEPARTMENT OF MECHANICAL ENGINEERING

MINUTES OF DEPARTMENT ACADEMIC COMMITTEE (DAC)

Date: 06-12-2025

The 29th Department Academic Committee (DAC) Meeting was conducted at 11:00 A.M. on 06/12/2025 in M118 (HOD Cabin).

Agenda of the Meeting

1. To discuss on the feedback given by the stakeholders
2. To discuss on the recommendations given by the course coordinators of 2025-26 even sem
3. To discuss on the course closure minutes of 2025-26 odd sem courses
4. Any other points with the permission of chair.

The following members were present:

1. Dr. T. Vijaya Kumar, Chair Person/HOD
2. Dr.K.V.Durga Rajesh, Dept.IQAC Incharge /Deputy HOD
3. Dr.S.N.Padhi, Faculty Representative/Cohort Professor I/C (Engineering Design)
4. Dr.G.Murali, Faculty Representative/Cohort professor I/C(Energy & CFD)
5. Dr.S.S.Rao, Faculty Representative/Cohort Professor I/C(Smart Manufacturing)
6. Dr.D.V.A.Rama Sastry, Faculty Representative/Dept. Student activities In Charge
7. Dr.G.Diwakar, Faculty Representative/PG coordinator & placement In charge
8. Dr.T.Kanthimathi, Academics Professor I/C & UG Programme Coordinator
9. Dr. K.Sai Sarath, Faculty Representative/Professor I/C Counselling
10. Dr. Priyaranjan Samal, Faculty Representative/Professor I/C OBE
11. Mr.Mr.K.Anudeep, M.Tech-MD, Student Representative (2301130009)
12. Mr.M.Aravind Reddy- M.Tech-MD, Student Representative (2301130003)
13. Mr.B.Uday Shankar-M.Tech-MD, Student Representative (2301130006)
14. Mr.B.Uday Shankar-M.Tech-MD, Student Representative (2301130006)
15. Mr.D.Sai Ganesh-M.Tech-MD, Student Representative (2301130001)
16. Mr.V.Sri Harsha-M.Tech-MD, Student Representative (2301130002)
17. Mr.V.Shyam- M.Tech-MD, Student Representative (2301130005)
18. Mr.K.Vikas- M.Tech-MD, Student Representative (2301130004)

Vijaya Kumar
6/12/25

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DAC Chairman welcomed all the members and delivered the agenda points to the members. Following are the deliberations in the meeting

Agenda-1: To discuss on the feedback given by stake holders	Resolution: It is resolved to approve the feedback given by stake holders and to put forth the same in the coming BOS.
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- Mr.B.Uday Shankar (2301130006), M.Tech-MD I year Student, requested to provide physical lab for Mechanics of Composite Materials course for fabrication. It is resolved to put forth the proposal to the concerned authorities for the establishment of the lab.
- Mr. D.Sai Ganesh (2301130001), M.Tech-MD I year student, requested to allow for the internships. Dr. S.N.Padhi, explained to the student, that they will be allowed to do the internships in the their II year of study.

Agenda-2: To discuss on the recommendations given by 2025-26 even sem course coordinators	Resolution: It is resolved to approve the recommendations of 2025-26 even sem courses coordinators and to put forth the same in the upcoming BOS for further approval
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- Dr.A.Srinath, suggested to revise the syllabus of 23ME04EF-Mechatronics & Robotics Course which is offered to Y23 admitted batch Honors through Experiential Learning students with an L-T-P-S :0-0-6-4, to meet the requirements of present industry. It is resolved to approve and recommend the syllabus revision to the BOS for further approval.
- Dr.P.V.Chalapathi, recommended to revise the syllabus of OEME0004-Total Quality Management offered to Y22 admitted batch as Open Elective, to make it more relevant to the industry processes. It is resolved to approve and recommend the revisions to the BOS for further approval.
- Dr. D.V.A Rama Sastry, recommended to revise the syllabus of 23SMF3304-Sustainable Design and Social Innovation in Smart manufacturing course offered to Y23 regulation students as PE-3 with an L-T-P-S of 3-0-2-4. This course was offered to Y22 regulation students with an L-T-P-S of 2-0-2-4. It is resolved to approve and recommend the revisions proposed in the course to the BOS for further approval.
- Dr.K.V.Durga Rajesh, recommended to change the CO statements of the course Modern Manufacturing Processes to be offered to Y23 batch students as PE-2 with an L-T-P-S:3-0-0-0, since the CO statement were not appropriate to the syllabus. It is resolved to approve and recommend the modifications of the CO statements tot the BOS for further approval.

[Signature]
6/12/25
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(Deemed to be University)
Green Fields, VADDESWARAM-522 302.



Koneru Lakshmaiah Education Foundation

(Category -I, Deemed to be University estd. u/s 3 of the UGC Act, 1956)

Campus: Green Fields, Vaddeswaram, 522 302, Guntur District, Andhra Pradesh, INDIA
Phone No. +91 8645 350 200, www.klief.ac.in, www.klief.edu.in, www.kluniversity.in
Admin Off: 29-35-38, Museum Road, Guntur, Andhra Pradesh, India. Pin-522 012, 20/6/25

Agenda-3: To discuss on the recommendations given by 2025-26 Odd sem Course coordinators in course closure meetings.

Resolution: It is resolved to approve the recommendations given by 2025-26 odd sem course coordinators and to put forth the same in the coming BOS.

Dr.T.Kanthimathi, course coordinator of 24ME2106-Fluid Mechanics & Hydraulic Machines course recommended to add one tutorial session, to make students practise more problems as they are not able to solve variety of problems.

It is resolved to approve the recommendation and suggest L-T-P-S of 3-1-2-0 for the course to Y26 admitted batch.

Dr.B.Kiran Kumar, course coordinator of 23SMF3101- Reverse Engineering and Rapid Prototyping course, recommended to recondition the CMM in Fab lab and also to add 3D scanner with software in the lab, so that students can do physical experiments in the equipment as they are doing these experiments in demo mode at present.

It is resolved to put forth the requisition of the faculty to the concerned authority for necessary action.

Agenda-4: Any other points with the permission of chair

Resolution: It is resolved to approve the other points and to put forth the same in BOS for further approval.

- Y17 batch student Mr. N.Praveen Kumar (ID No. 170070255) requested to give permission to attend for the supple exam in the course 17ME3219-Design and Manufacturing-II course, as his 8 year tenure is completed.
It is resolved to propose the request of the student to the BOS for approval.
- It is resolved to approve the OBE analysis and Gap analysis of 2025-26 Odd Sem courses and to put forth the same to the BOS for further approval.



Guntur, Andhra Pradesh, India
KL University Main Road, Tadepalle, Guntur,
Andhra Pradesh 522302, India
Lat 16.440395, Long 80.622799
12/06/2025 11:21 AM GMT+05:30
Note: Captured by GPS Map Camera

[Signature]
6/12/25

Professor I/C Academics

[Signature]
6/12/25

Chairman-DAC
HOD-ME

Dr. T. VIJAYA KUMAR
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2025-26 DAC meeting - Faculty Attendance

<u>S.No.</u>	<u>Name of the member</u>	<u>Designation</u>	<u>Signature</u>
1.	Dr. K. V. Sarga Rajesh	Assoc. Prof.	KVS Rajesh
2.	Dr. K. Sai Sarath	Asst. Prof	K. Sai Sarath
3.	Dr. G. DIWAKAR	professor	G. Diwakar
4.	Dr. G. Murali	Professor	G. Murali
5.	Dr. S. S. Rao	professor	S. S. Rao
6.	Dr. S. V. Reddy	Professor	S. V. Reddy
7.	Dr. DVA Rame Suresh	Assoc. Prof	DVA Rame Suresh
8.	Dr. P. Samal	Asst Prof	P. Samal
9.	Dr. T. Kanthimathi	Asst. Prof.	T. Kanthimathi
10.	Dr. T. Vijaya Kumar	Assoc. Prof.	T. Vijaya Kumar

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Student Attendance

<u>S.NO.</u>	<u>Name of the member</u>	<u>ID.NO.</u>	<u>Signature</u>
①	K. Anudeep	2301130009	K. Anudeep
②	M. Aravind Reddy	2501130003	M. Aravind Reddy
③	B. Uday Shankar	2501130006	B. Uday Shankar
④	D. Sai Ganesh	2501130001	D. Sai Ganesh
⑤	V. Shyam	2501130005	V. Shyam
⑥	V. Sai Harsha	2501130002	V. Sai Harsha
⑦	K. VIKAS	2501130004	K. VIKAS

Course wise Syllabus revision

Course Code: 23ME04EF

Course Category: HEC

Course Name: Mechatronics and Robotics

Course Coordinator: Dr.A.Srinath

L-T-P-S:0-0-6-4

Existing Syllabus (as per Annexure-3)	New Syllabus (as per Annexure-3)	Topics Added/Removed/Replaced	Change in Outcome	Justification for the Modification	*Overall Revision Percentage
Introduction to Mechatronics and Robotics system and basic components, Historical background and applications for checking kinematic structures Degrees of Freedom, Kinematics introduction like link, Joint, and Forward kinematics, and Jacobian for 2R and 3DOF Robots Sensors, classification Proximity, Range, Force and other sensors required for checking the Robotics performance, actuators classifications, requirements of actuators for the field of Robotics and Mechatronics systems Micro controllers -Embedded systems- Interfacing sensors and actuators with microcontrollers Real-time operating systems (RTOS) for robotics- PID controllers, Motion planning and trajectory generation Robotic Applications and Case Studies Industrial Robotics Mobile robots Robotic manipulation and grasping	INTRODUCTION TO MECHATRONICS AND ROBOTICS: Introduction, elements of a mechatronic system, applications; robot anatomy and major components; robotic-like devices; classification by coordinate system and by control method; specifications; fixed versus flexible automation. SENSORS AND TRANSDUCERS: Classification and selection. Strain gauges; displacement transducers; capacitive and inductive transducers; LVDT; oscillation and piezoelectric transducers; potentiometric; velocity and temperature transducers; optical encoders. ROBOTIC SENSORY DEVICES AND PROXIMITY: Potentiometers; synchros; inductosyn; optical position sensors; proximities, contact and non-contact; scanning laser; touch and slip sensors; force and torque sensors. SIGNAL CONDITIONING AND DATA PRESENTATION: Data acquisition, quantizing theory, ADC and DAC; data presentation elements; systems measurement; testing and calibration. ACTION SYSTEMS: Pneumatic and hydraulic actuation systems; DC motor; stepper; servo.	Topic Added: • Elements of mechatronic system & automation types • Detailed classical transducers • Robotic sensory devices (touch, slip, inductosyn, laser) • Signal conditioning & DAQ • Pneumatic, hydraulic, DC, stepper, servo actuators • System modelling & transfer functions • Advanced control (continuous, discrete, P/I/D, frequency response) • Digital logic & PLC programming	CO1-20% CO2-20% CO3-20% CO4-20%	As per the feedback received from the faculty modification in the syllabus is proposed to make students more adoptable to the present robotic industry	80%


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			● End effector design & selection ● DH transformations, inverse kinematics, singularities ● Robot languages (AL, AML, VAL, RAIL) ● Detailed industrial robotics applications + CNC case studies		
SYSTEM MODELS AND RESPONSE: Modelling of one- and two-DOF mechanical, electrical, fluid and thermal systems; block diagram representations; transfer function; time and frequency response. CLOSED LOOP CONTROLLERS: Continuous and discrete processes; two-step, proportional, derivative, integral, PID controllers. DIGITAL LOGIC AND PLC: Logic gates; Boolean algebra; Karnaugh maps. PLC introduction; basic structure; input and output processing; programming; ladder diagrams; timers; internal relays and counters; data handling; analog I/O; selection. ROBOT END EFFECTORS: Introduction; interfacing; grippers and tools; selection considerations. TRANSFORMATIONS AND KINEMATICS: Homogeneous coordinates; basic transformation operations; forward solution using Denavit-Hartenberg (DH) procedure for planar manipulators; inverse solution, issues and techniques. TRAJECTORY PLANNING AND JACOBIAN: Joint-space trajectories; manipulator Jacobian; velocity mapping; singularities. ROBOT LANGUAGES AND APPLICATIONS: AL, AML, VAL, RAIL; applications in material transfer and handling, loading and unloading, process operations, welding, spray painting, grinding, assembly and inspection, non-industrial uses. DESIGN AND CASE STUDY: Mechatronic system design; possible design solutions; case studies such as pick-and-place robot and CNC machine.					

*Overall Revision Percentage= sum of percentage of Course Outcome revision. Any revision to the tune of 25% or above is considered as a new course. In all other cases the course code is changed and the course is considered as a revised course.

Each CO revision percentage is calculated based on the extent to which the outcome has been revised through addition or deletion of topics.



Course Coordinator



HOD-ME

12/12/25

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Course wise Syllabus revision

Course Code: 23SMF3304R/A

Course Category: PE

Course Name: SUSTAINABLE DESIGN AND SOCIAL INNOVATION IN SMART MANUFACTURING

Course Coordinator: V. A. Rama Sastry Devulapalli

L-T-P-S: 3-0-2-4

Existing Syllabus (as per Annexure-3)	New Syllabus (as per Annexure-3)	Topics Added/Removed/Replaced	Change in Outcome	Justification for the Modification	*Overall Revision Percentage
Introduction to sustainable design, SDG alignment, and innovation processes. Exploring problem identification through surveys, defining insights, and generating concepts. Evaluating and modeling designs using Fusion 360. Applying sustainable principles, refining solutions, and integrating smart manufacturing fundamentals. Developing physical prototypes, testing performance, and iterating improvements. Incorporating social innovation examples in manufacturing to enhance sustainability and enable smart industry practices.	Introduction to Sustainable Design: Definition, goals, and principles of sustainable design – Evolution from traditional to sustainable engineering – Three pillars of sustainability (environment, economy, society) – Life Cycle Thinking and cradle-to- cradle philosophy – Role of engineers in sustainability – Case studies on eco-friendly and lightweight design – Emerging challenges and opportunities. SDGs and Innovation for Sustainability : Overview of UN Sustainable Development Goals – SDGs relevant to manufacturing – Aligning design education with SDGs –Innovation frameworks: product, process, and business model innovation – Case studies: renewable energy integration, green materials – Barriers and enablers for SDG adoption in industry. Problem Identification and Concept Generation : Engineering design process (Dieter's Model) – Problem definition and sustainability context – Surveys, interviews, and user research – Social innovation lens: empathy mapping, need identification – Concept generation tools (Brainstorming, TRIZ, Morphological chart, Biomimicry) – Concept screening and selection (Pugh matrix, AHP) – Case study: water-saving irrigation system. Design Evaluation and Modeling : Sustainable design evaluation: functionality, cost, energy, emissions – Life Cycle Assessment (LCA), Ecological Footprint, Carbon Accounting –	To improve integration of more issues	CO-1 – 10% CO-2 – 20% CO-3– 20% CO-4– 20%		20%

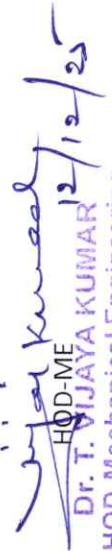
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12/12/25

	Modeling and Simulation for energy and material optimization – Digital twins for prototyping – Case study: electric vehicle component optimization. Smart Manufacturing Systems : Definition and architecture of smart manufacturing – IoT, AI, and data analytics integration – Digital twins and cyber-physical systems – Design refinement: modularity, lightweighting, material substitution – Case study: smart factories in automotive and energy sectors – Benefits: efficiency, customization, waste reduction – Challenges: cost, cybersecurity, workforce upskilling. Circular Economy in Manufacturing: Concept and principles of circular economy – Linear vs circular models – 3R → 6R framework (Reduce, Reuse, Recycle, Recover, Redesign, Remanufacture) – Product-Service Systems (PSS) – Reverse logistics – Design for disassembly and material recovery – Case studies: electronics and textile industries – Policy frameworks and best practices. Green Manufacturing and Sustainable : Production Definition and comparison of green vs sustainable manufacturing – Product, process, and system-level sustainability – Tools: LCA, Cleaner Production, Lean-Green integration – Global frameworks: ISO 14000, GRI, Carbon Disclosure – Case studies: additive manufacturing for sustainability – Future: carbon-neutral plants, Industry 5.0. Social Innovation and Inclusive Manufacturing : Definition and drivers of social innovation – Human-centered design for social impact – Ethical sourcing and inclusive production systems – Social entrepreneurship models and innovation ecosystems – Case studies– Human-centric smart factories and Industry 5.0 paradigm.			
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 Each CO revision percentage is calculated based on the extent to which the outcome has been revised through addition or deletion of topics.


 Course Coordinator


 HOD-ME
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Course wise Syllabus revision

Course Code: OEME0004

Course Category: OE

Course Name: Total Quality Management

Course Coordinator: Dr.P.V.Chalapathi

L-T-P-S:3-0-0-0

Existing Syllabus (as per Annexure-3)	New Syllabus (as per Annexure-3)	Topics Added/Removed/Replaced	Change in Outcome	Justification for the Modification	*Overall Revision Percentage
Principles and Practice: Definition of TQM, basic approach, Obstacles to TQM, TQM Framework, benefits of TQM. Business Evolution: Customer Satisfaction, four fitness of Customer Satisfaction, Evolution of Customer Satisfaction Methodology, Leadership vs Empowerment, Four Practical Revolutions in Management thinking, Four Levels of Practice. Customer Focus: Change in the Work Concept: Market-in, Philosophy-in and Philosophy-out, Evolution of Customer Focus and Its Challenges, Three Stages of Customer Focus, Customer Concerns, Integration of Concerns, Individualizing Customers. Continuous Improvement: Management by process, WV Model of Continuous Improvement, Three types of improvements, Continuous Improvement of Processes for All	Introduction about TQM, definition of TQM, Basic approach, obstacles to TQM, TQM gurus TQM framework, benefits of TQM, Customer satisfaction, customer perception of quality Feedback, Service quality, customer retention, 7 habits of effective people, ethics, Deming philosophy, Quality leadership, Quality circles, Continuous process improvement, Juran trilogy, Improvement measures, strategy,	Customer perception of quality, Feedback, Service quality, customer retention, 7 habits of effective people, ethics, Deming philosophy, Skills of leadership, Quality circles, Continuous process improvement, Juran trilogy, Improvement strategies, Types of problems, PDSA cycle, problem-solving methods, Kaizen, reengineering, Six sigma, Performance measures, strategy,	CO1-10% CO2-15% CO3-15% CO4-10%	As per the feedback received from the faculty modifications in the syllabus were made to make it more relevant to attain outcomes	50%


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Types of Work, Continuous Improvement verses breakthrough, Continuous Improvement and the Scientific Method. Managing Existing Processes: Process Discovery and Management: Thinking In Terms of Process, Process Discovery, steps of Process Discovery, benefits of Process Discovery. The 7 QC Tools. Proactive Improvement: Proactive Improvement concept, Kawakita's Five Principles, Language Data and Use of Semantics, Comparison of Affective and Report language, Five principles of Customer Visitation, The purpose of Proactive Improvement to Develop New Products. Total Participation: Employee Involvement Motivation, employee surveys, empowerment, teams, suggestion system, recognition and reward, gain sharing, performance appraisal, unions and employee involvement, three sets of skills of leader ship. QC Circles.	strategies, Types of problems PDSA cycle, problem solving methods, Kaizen, reengineering, Six sigma, Performance measures, strategy, Cost of quality, Analysis, improvement action plan Tools & techniques, Benchmarking, Quality management system, Environmental management system, Quality function Quality function deployment, Quality by Quality by design, Failure mode and effect analysis, Total productive maintenance, Taguchi quality engineering	Cost of quality, Analysis, Tools & techniques, Benchmarking, Quality management system, Environmental management system, Quality function deployment, Quality by design, Failure mode and effect analysis, Total productive maintenance, Taguchi quality engineering		
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*Overall Revision Percentage= sum of percentage of Course Outcome revision. Any revision to the tune of 25% or above is considered as a new course. In all other cases the course code is changed and the course is considered as a revised course.
Each CO revision percentage is calculated based on the extent to which the outcome has been revised through addition or deletion of topics.


Course Coordinator


HOD-ME 12/12/25
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Course wise Syllabus revision

Course Code: 23SMF3203R

Course Category: Professional Elective-2

Course Name: MODERN MANUFACTURING PROCESSES

Course Coordinator: Dr. K. V. Durga Rajesh

L-T-P-S: 3-0-0-0

Existing CO's	New CO's	Topics Added/Removed/Replaced	Change in Outcome	Justification for the Modification	*Overall Revision Percentage
CO1-Understand the fundamental concepts of modern manufacturing processes based on sources of energy CO2- Identify and analyse mechanical energy-based machining processes and evaluate their advantages, limitations and applications CO3- Describe chemical energy-based machining processes and evaluate their advantages, limitations and applications CO4-Explain and analyse the principles and applications of thermoelectric machining processes	CO1- Apply the principles of mechanical energy based modern machining processes to analyze process parameters and choose suitable machining techniques for specific manufacturing applications CO2- Apply the principles of chemical and thermoelectric energy based machining processes to analyze process parameters and select suitable machining techniques for specific manufacturing applications CO3- Apply the principles and key parameters of various non-traditional welding processes to select and justify suitable applications CO4- Understand the principles, methods and applications of various non-traditional forming processes	Course Outcomes modified as per syllabus	Yes	Previously available course covered only 2 modules of syllabus. Now CO's modified by covering all 4 modules of syllabus	0 % No syllabus changed

*Overall Revision Percentage= sum of percentage of Course Outcome revision. Any revision to the tune of 25% or above is considered as a new course. In all other cases the course code is changed and the course is considered as a revised course.
Each CO revision percentage is calculated based on the extent to which the outcome has been revised through addition or deletion of topics.

K. V. Durga Rajesh
Course Coordinator

COURSE CODE	24OEME04	COURSE CATEGORY			OE		
COURSE TITLE	Total Quality Management	L	T	P	S	Cr	CH
Pre-Requisite Course(s)	Nil	3	0	0	0	3	3
		Course Offering Department			MECHANICAL		

COURSE OUTCOMES:

CO NO.	COURSE COUTCOME (CO)	PO/PSO	BTL
CO-1	Understand the concepts of TQM and customer satisfaction.	PO11	2
CO-2	Understand employee involvement, motivation, empowerment and performance appraisal.	PO11	2
CO-3	Understand continuous process improvement, Kaizen, six sigma.	PO11	2
CO-4	Understand tools & techniques in QC and Taguchi quality engineering.	PO11	2

SYLLABUS:

Module 1	Introduction about TQM, definition of TQM, Basic approach, obstacles to TQM, TQM gurus TQM framework, benefits of TQM, Customer satisfaction, customer perception of quality Feedback, Service quality, customer retention, 7 habits of effective people, ethics, Deming philosophy
Module 2	Employee involvement, motivation, employee surveys, Empowerment, teams Suggestion system, recognition. & reward, recognition & reward, gainsharing, Performance appraisal, union & employee involvement, benefits, union & employee involvement, benefits Skills of leadership, Quality circles
Module 3	Continuous process improvement, Juran trilogy, Improvement strategies, Types of problems PDSA cycle, problem solving methods, Kaizen, reengineering, Six sigma, Performance measures, strategy, Cost of quality, Analysis, improvement action plan
Module 4	Tools & techniques, Benchmarking, Quality management system, Environmental management system, Quality function deployment, Quality by design, Failure mode and effect analysis, Total productive maintenance, Taguchi quality engineering

TEXTBOOKS:

1	Total Quality Management"- Besterfield, Pearson Education, 2011. ISBN, 817758412X
2	Management for Total Quality"-N Logothetis- Prentice Hall of India, New Delhi, 2003
3	Total Quality Management"-H D Ramachandra and K R Phanesh-2006 edition.


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Department of Mechanical Engineering — KLVZA
COURSE HANDOUT
2025-2026, Even Semester

Course Title	Mechatronics & Robotics
Course Code	23ME04EF
L-T-P-S Structure	0-0-6-4
Credits	4
Pre-requisites	Basic circuits, programming, calculus, linear algebra

COURSE OUTCOMES (COs) :

CO No	Course Outcome (CO)	PO/PSO	BTL
CO1	Analyze mechatronic and robotic subsystems, anatomy and specifications; justify sensor and actuator choices.	PO2, PO3	3
CO2	Build DAQ chains with ADC/DAC; model common mechanical and electrical subsystems to predict responses.	PO2	3
CO3	Design/tune basic controllers; implement discrete control using PLC ladder logic for a small cell.	PO2	3
CO4	Compute FK and IK, Jacobian; plan joint-space trajectories for simple manipulators.	PO3	4
CO5	Identify suitable end-effectors, sensing and robot languages; validate an integrated demo.	PO5	4

Syllabus :

INTRODUCTION TO MECHATRONICS AND ROBOTICS: Introduction, elements of a mechatronic system, applications; robot anatomy and major components; robotic-like devices; classification by coordinate system and by control method; specifications; fixed versus flexible automation.

SENSORS AND TRANSDUCERS: Classification and selection. Strain gauges; displacement transducers; capacitive and inductive transducers; LVDT; oscillation and piezoelectric transducers; potentiometric; velocity and temperature transducers; optical encoders.

ROBOTIC SENSORY DEVICES AND PROXIMITY: Potentiometers; synchros; inductosyn; optical position sensors; proximity sensors, contact and non-contact; scanning laser; touch and slip sensors; force and torque sensors.

SIGNAL CONDITIONING AND DATA PRESENTATION: Data acquisition, quantizing theory, ADC and DAC; data presentation elements; systems measurement; testing and calibration.

Vijaya Kumar
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ACTUATION SYSTEMS: Pneumatic and hydraulic actuation systems; DC motor; stepper; servo.

SYSTEM MODELS AND RESPONSE: Modelling of one- and two-DOF mechanical, electrical, fluid and thermal systems; block diagram representations; transfer function; time and frequency response.

CLOSED LOOP CONTROLLERS: Continuous and discrete processes; two-step, proportional, derivative, integral, PID controllers.

DIGITAL LOGIC AND PLC: Logic gates; Boolean algebra; Karnaugh maps. PLC introduction; basic structure; input and output processing; programming; ladder diagrams; timers; internal relays and counters; data handling; analog I/O; selection.

ROBOT END EFFECTORS: Introduction; interfacing; grippers and tools; selection considerations.

TRANSFORMATIONS AND KINEMATICS: Homogeneous coordinates; basic transformation operations; forward solution using Denavit-Hartenberg (DH) procedure for planar manipulators; inverse solution, issues and techniques.

TRAJECTORY PLANNING AND JACOBIAN: Joint-space trajectories; manipulator Jacobian; velocity mapping; singularities.

ROBOT LANGUAGES AND APPLICATIONS: AL, AML, VAL, RAIL; applications in material transfer and handling, loading and unloading, process operations, welding, spray painting, grinding, assembly and inspection, non-industrial uses.

DESIGN AND CASE STUDY: Mechatronic system design; possible design solutions; case studies such as pick-and-place robot and CNC machine.

Lab Syllabus :

- Safety, toolchain bring-up; breadboard potentiometric position sensor, MCU ADC logging.
- Encoder and reflective proximity calibration; static and dynamic error plots.
- Load-cell signal conditioning with instrumentation amplifier; ADC acquisition and frequency sweep.
- H-bridge DC motor control and stepper driver bring-up; basic speed loop.
- System identification of motor-load from step tests; first/second-order fits.
- PID tuning workflow on speed loop; ZN vs model-based approach.
- PLC ladder for two-sensor interlocked pick-place cell with timers.


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- End-effector concept; parallel gripper fixture build.
- Force/touch/slip sensing at the gripper; contact detection and logging.
- Forward kinematics (FK) for a 2R arm; simulator/desktop arm validation.
- Jacobian exploration and singularity behavior on 2R arm.
- Quintic joint-space trajectory generation and execution; tracking error.
- PLC-arm integration: feeder → bin with quality flag.
- Capstone demo: integrated mechatronic robot task with supporting data.

Text Books :

- Bolton, Mechatronics, Pearson.
- Alciatore & Hiestand, Introduction to Mechatronics and Measurement Systems, McGraw-Hill.
- Klafter, Robotic Engineering, PHI.
- Groover, Industrial Robotics, McGraw-Hill.

Reference Books :

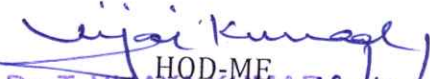
- Sawhney; Mahalik; HMT; Beckwith & Buck.
- Fu, Gonzalez & Lee; Yoram Koren; Mittal & Nagrath.


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Course Closure meetings and Action Taken for 2025-26 Odd Sem Courses

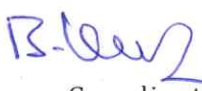
Course Code	24ME2106
Course Name	Fluid Mechanics & Hydraulic Machines
Course Coordinator	Dr.T.Kanthimathi
Emp ID	3583
Whether the course objective and rationale has been met?	Yes
Whether the course outcomes have been attained to threshold value decided by the course team or not?	Yes
Average attendance of the students across the semester.	86%
Quality of the question paper and the performance on Higher Order Thinking (HOT) questions justified?	Yes justified
Number of students taken part in remedial classes and the outcome of the same.	10/18
Consolidation on feedback given by students (both preliminary and end semester) and remedial/ corrective action proposed by the course team.	92%
Projects / Hackathons / publications or any other achievements done as a part of the course under case studies etc.	No
Impact of FDP and SRP conducted prior to handling of the course, on the delivery and evaluation of the course and suggestions by the course team to improvise the same in future.	SRP conducted helped to deliver the course effectively
Feedback about the course from Industry experts on the topics, lab modules etc.	As per the feedback received from industry experts the course content is on par with the industry requirements.
Industry Lectures conducted towards the course outcome and the effectiveness of the same.	No
Benchmarking done against any Industry standard tools / International certification courses.	Yes
Feed back on course from the alumni.	Satisfactory
Challenges / hurdles with respect to implementing any ALMs, use of tools, complexity of the course, following the session plan, etc.	No challenges were faced
Consolidate the recommendations given by the CC and the course instruction team for improving the future delivery of same/ similar course be submitted to DAC.	As per the content of the course, more problems need to be solved in the class sessions which requires one more teaching hour
Deliberations of DAC on each such recommendation and the action to be taken / recommendations to be forwarded to BoS.	It is recommended to DAC and BOS to include one more tutorial hour for the course to make the students solve more problems.


 Course Coordinator


 Dr. T. VIJAYA KUMAR
 HOD-ME
 HOD-Mechanical Engineering
 Koneru Lakshmaiah Education Foundation
 (Deemed to be University)
 Green Fields, VADDESWAREM-522 302.

Course Closure meetings and Action Taken for 2025-26 Odd Sem Courses

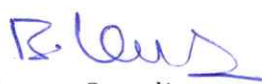
Course Code	23SMF3101A
Course Name	Reverse Engineering & Rapid Prototyping
Course Coordinator	Dr. B Kiran Kumar
Emp ID	4059
Whether the course objective and rationale has been met?	Yes
Whether the course outcomes have been attained to threshold value decided by the course team or not?	Yes
Average attendance of the students across the semester.	96%
Quality of the question paper and the performance on Higher Order Thinking (HOT) questions justified?	Yes
Number of students taken part in remedial classes and the outcome of the same.	2
Consolidation on feedback given by students (both preliminary and end semester) and remedial/ corrective action proposed by the course team.	84.4%
Projects / Hackathons / publications or any other achievements done as a part of the course under case studies etc.	Yes
Impact of FDP and SRP conducted prior to handling of the course, on the delivery and evaluation of the course and suggestions by the course team to improvise the same in future.	Good
Feedback about the course from Industry experts on the topics, lab modules etc.	Good
Industry Lectures conducted towards the course outcome and the effectiveness of the same.	Yes
Benchmarking done against any Industry standard tools / International certification courses.	-
Feed back on course from the alumni.	Good
Challenges / hurdles with respect to implementing any ALMs, use of tools, complexity of the course, following the session plan, etc.	-
Consolidate the recommendations given by the CC and the course instruction team for improving the future delivery of same/ similar course be submitted to DAC.	Reconditioning of CMM and addition of 3D scanner with software will help students to do more experiments
Deliberations of DAC on each such recommendation and the action to be taken / recommendations to be forwarded to BoS.	


Course Coordinator


HOD-ME
9/12/25
Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, VADDESWAREM-522 302.

Course Closure meetings and Action Taken for 2025-26 Odd Sem Courses

Course Code	23SMF3101R
Course Name	Reverse Engineering & Rapid Prototyping
Course Coordinator	Dr. B Kiran Kumar
Emp ID	4059
Whether the course objective and rationale has been met?	Yes
Whether the course outcomes have been attained to threshold value decided by the course team or not?	Yes
Average attendance of the students across the semester.	92%
Quality of the question paper and the performance on Higher Order Thinking (HOT) questions justified?	Yes
Number of students taken part in remedial classes and the outcome of the same.	2
Consolidation on feedback given by students (both preliminary and end semester) and remedial/ corrective action proposed by the course team.	91%
Projects / Hackathons / publications or any other achievements done as a part of the course under case studies etc.	Yes
Impact of FDP and SRP conducted prior to handling of the course, on the delivery and evaluation of the course and suggestions by the course team to improvise the same in future.	Good
Feedback about the course from Industry experts on the topics, lab modules etc.	Good
Industry Lectures conducted towards the course outcome and the effectiveness of the same.	Yes
Benchmarking done against any Industry standard tools / International certification courses.	-
Feed back on course from the alumni.	Good
Challenges / hurdles with respect to implementing any ALMs, use of tools, complexity of the course, following the session plan, etc.	-
Consolidate the recommendations given by the CC and the course instruction team for improving the future delivery of same/ similar course be submitted to DAC.	Reconditioning of CMM and addition of 3D scanner with software will help students to do more experiments
Deliberations of DAC on each such recommendation and the action to be taken / recommendations to be forwarded to BoS.	


Course Coordinator


HOD-ME 9/12/25

Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
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Green Fields, VADDESWAREM-522 302.

Course Closure meetings and Action Taken for 2025-26 Odd Sem Course

Course Code	23MT2011
Course Name	Optimization Techniques
Course Coordinator	Dr. K. V. Durga Rajesh
Emp ID	2520
Whether the course objective and rationale has been met?	Yes
Whether the course outcomes have been attained to threshold value decided by the course team or not?	Based on In sem exam (Summative) attainments are CO-1 - 60.7 CO-2 - 82.1 CO-3 - 80 CO-4 - 72.7
Average attendance of the students across the semester.	91 %
Quality of the question paper and the performance on Higher Order Thinking (HOT) questions justified?	Justified
Number of students taken part in remedial classes and the outcome of the same.	Total 23 students got eligibility to attend for remedial classes. 20 students out of 23 got above 85% attendance and got eligibility to attempt remedial exams. In remedial exam, 1 student was absent and marks improved for 16 students and no change for 3 students
Consolidation on feedback given by students (both preliminary and end semester) and remedial/corrective action proposed by the course team.	Yes. No comments received from students
Projects / Hackathons / publications or any other achievements done as a part of the course under case studies etc.	NA as LTPS is 2-2-0-0
Impact of FDP and SRP conducted prior to handling of the course, on the delivery and evaluation of the course and suggestions by the course team to improvise the same in future.	FDP and SRP helped a lot in course delivery and in future also FDP's are recommended during SRP
Feedback about the course from Industry experts on the topics, lab modules etc.	This course was discussed in BOS and approved by industry experts and alumni. This course is very much necessary and useful to Mechanical Engineering students
Industry Lectures conducted towards the course outcome and the effectiveness of the same.	Yes
Benchmarking done against any Industry standard tools / International certification courses.	Yes
Feed back on course from the alumni.	Yes
Challenges / hurdles with respect to implementing any ALMs, use of tools, complexity of the course, following the session plan, etc.	No. All ALM's conducted as per the schedule and followed session plan without any deviation
Consolidate the recommendations given by the CC and the course instruction team for improving the future delivery of same/similar course be submitted to DAC.	No recommendations are there, as all components are appropriate
Deliberations of DAC on each such recommendation and the action to be taken / recommendations to be forwarded to BoS.	No major recommendations are there, as all components are appropriate.


Course Coordinator


HOD-ME
HOD-Mechanical Engineering
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Course Closure meetings and Action Taken for 2025-26 Odd Sem Course

Course Code	22SMF3508
Course Name	Flexible Manufacturing Systems
Course Coordinator	Dr. K. V. Durga Rajesh
Emp ID	2520
Whether the course objective and rationale has been met?	Yes
Whether the course outcomes have been attained to threshold value decided by the course team or not?	Based on In sem exam (Summative) attainments are CO-1 - 96.2 CO-2 - 57.7 CO-3 - 74.1 CO-4 - 81.5
Average attendance of the students across the semester.	91 %
Quality of the question paper and the performance on Higher Order Thinking (HOT) questions justified?	Justified
Number of students taken part in remedial classes and the outcome of the same.	Not conducted remedial classes for Professional electives
Consolidation on feedback given by students (both preliminary and end semester) and remedial/corrective action proposed by the course team.	Yes. No comments received from students
Projects / Hackathons / publications or any other achievements done as a part of the course under case studies etc.	NA as LTPS is 2-0-2-0
Impact of FDP and SRP conducted prior to handling of the course, on the delivery and evaluation of the course and suggestions by the course team to improvise the same in future.	FDP and SRP helped a lot in course delivery and in future also FDP's are recommended during SRP
Feedback about the course from Industry experts on the topics, lab modules etc.	This course was discussed in BOS and approved by industry experts and alumni. This course is very much necessary and useful to Mechanical Engineering students
Industry Lectures conducted towards the course outcome and the effectiveness of the same.	Yes
Benchmarking done against any Industry standard tools / International certification courses.	Yes
Feed back on course from the alumni.	Yes
Challenges / hurdles with respect to implementing any ALMs, use of tools, complexity of the course, following the session plan, etc.	No. All ALM's conducted as per the schedule and followed session plan without any deviation
Consolidate the recommendations given by the CC and the course instruction team for improving the future delivery of same/ similar course be submitted to DAC.	No recommendations are there, as all components are appropriate
Deliberations of DAC on each such recommendation and the action to be taken / recommendations to be forwarded to BoS.	No major recommendations are there, as all components are appropriate.

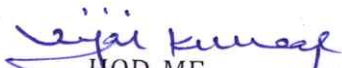

Course Coordinator


HOD-ME
Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
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Green Fields, VADDESWAREM-522 302.

Course Closure meetings and Action Taken for 2025-26 Odd Sem Courses

Course Code	23ME01HF
Course Name	RENEWABLE ENERGY SYSTEMS
Course Coordinator	VIKRANT CHANDRAKAR
Emp ID	9304
Whether the course objective and rationale has been met?	Yes
Whether the course outcomes have been attained to threshold value decided by the course team or not?	Yes
Average attendance of the students across the semester.	89%
Quality of the question paper and the performance on Higher Order Thinking (HOT) questions justified?	Yes
Number of students taken part in remedial classes and the outcome of the same.	00
Consolidation on feedback given by students (both preliminary and end semester) and remedial/corrective action proposed by the course team.	Feedback is satisfactory
Projects / Hackathons / publications or any other achievements done as a part of the course under case studies etc.	The student participated in Smart India Hackathons in the related field
Impact of FDP and SRP conducted prior to handling of the course, on the delivery and evaluation of the course and suggestions by the course team to improvise the same in future.	It was helpful for course conduct in the given semester.
Feedback about the course from Industry experts on the topics, lab modules etc.	NA
Industry Lectures conducted towards the course outcome and the effectiveness of the same.	No
Benchmarking done against any Industry standard tools / International certification courses.	Yes
Feed back on course from the alumni.	Satisfactory
Challenges / hurdles with respect to implementing any ALMs, use of tools, complexity of the course, following the session plan, etc.	Necessary adjustments were taken to fulfill.
Consolidate the recommendations given by the CC and the course instruction team for improving the future delivery of same/ similar course be submitted to DAC.	It can be implemented as a regular course compared to an honors-only course.
Deliberations of DAC on each such recommendation and the action to be taken / recommendations to be forwarded to BoS,	As India focuses on Energy independence, all students should be aware of the available Renewable energy sources; therefore, this subject should be made available to all students.


Course Coordinator


HOD-ME 12/12/25
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Course Closure meetings and Action Taken for 2025-26 Odd Sem Courses

Course Code	22ME2226F
Course Name	Electric Vehicle Technology
Course Coordinator	Dr.K. Sai Sarath
Emp ID	3654
Whether the course objective and rationale has been met?	Yes
Whether the course outcomes have been attained to threshold value decided by the course team or not?	Yes, the course outcomes have been attained to threshold value decided by the course team
Average attendance of the students across the semester.	Satisfactory, No Detained Case under Attendance
Quality of the question paper and the performance on Higher Order Thinking (HOT) questions justified?	Yes Justified. Students Performance in TESTS is above normal.
Number of students taken part in remedial classes and the outcome of the same.	
Consolidation on feedback given by students (both preliminary and end semester) and remedial/corrective action proposed by the course team.	Feedback given by the students is satisfactory
Projects / Hackathons / publications or any other achievements done as a part of the course under case studies etc.	Course Certification
Impact of FDP and SRP conducted prior to handling of the course, on the delivery and evaluation of the course and suggestions by the course team to improvise the same in future.	NA
Feedback about the course from Industry experts on the topics, lab modules etc.	The activities framed are more than sufficient
Industry Lectures conducted towards the course outcome and the effectiveness of the same.	It is Flexi core course in Mechanical Engineering all the CO's are relevant to industry problems
Benchmarking done against any Industry standard tools / International certification courses.	NA
Feed back on course from the alumni.	NA
Challenges / hurdles with respect to implementing any ALMs, use of tools, complexity of the course, following the session plan, etc.	Satisfactory
Consolidate the recommendations given by the CC and the course instruction team for improving the future delivery of same/ similar course be submitted to DAC.	NA
Deliberations of DAC on each such recommendation and the action to be taken / recommendations to be forwarded to BoS.	NA

K. Sai Sarath

Course Coordinator

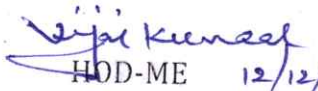
Vijaya Kumar
HOD-ME 12/12/25

Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
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Green Fields, VADESWARAM-522 302.

Course Closure meetings and Action Taken for 2025-26 Odd Sem Courses

Course Code	23ME3110 R & 23ME3110 A
Course Name	Heat Transfer
Course Coordinator	Dr.G.Murali
Emp ID	5171
Whether the course objective and rationale has been met?	Yes
Whether the course outcomes have been attained to threshold value decided by the course team or not?	Yes, the course outcomes have been attained to threshold value decided by the course team
Average attendance of the students across the semester.	Satisfactory, No Detained Case under Attendance
Quality of the question paper and the performance on Higher Order Thinking (HOT) questions justified?	Yes Justified. Students Performance in TESTS is above normal.
Number of students taken part in remedial classes and the outcome of the same.	-
Consolidation on feedback given by students (both preliminary and end semester) and remedial/corrective action proposed by the course team.	Feedback given by the students is satisfactory
Projects / Hackathons / publications or any other achievements done as a part of the course, under case studies etc.	NA
Impact of FDP and SRP conducted prior to handling of the course, on the delivery and evaluation of the course and suggestions by the course team to improvise the same in future.	NA
Feedback about the course from Industry experts on the topics, lab modules etc.	The activities framed are more than sufficient
Industry Lectures conducted towards the course outcome and the effectiveness of the same.	It is Flexi core course in Mechanical Engineering all the CO's are relevant to industry problems
Benchmarking done against any Industry standard tools / International certification courses.	NA
Feed back on course from the alumni.	NA
Challenges / hurdles with respect to implementing any ALMs, use of tools, complexity of the course, following the session plan, etc.	Satisfactory
Consolidate the recommendations given by the CC and the course instruction team for improving the future delivery of same/ similar course be submitted to DAC.	NA
Deliberations of DAC on each such recommendation and the action to be taken / recommendations to be forwarded to BoS.	NA


Course Coordinator


HOD-ME 12/12/25
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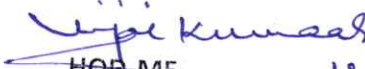
DEPARTMENT OF MECHANICAL ENGINEERING
B.TECH-MECHANICAL ENGINEERING For Y22 (Regular) ADMITTED BATCH
Program Total Credits:173

1	mandatory	11	PE 6
	Min. Credits 134		Min. Credits
2	PE1	12	PE 7
	Min. Credits 4		Min. Credits
3	pe2	13	PE 8
	Min. Credits 3		Min. Credits
4	pe3	14	PE 9
	Min. Credits 4		Min. Credits
5	OE	15	PE 10
	Min. Credits 9		Min. Credits
6	PE4	16	OE4
	Min. Credits 3		Min. Credits
7	PE5	17	FL
	Min. Credits 3		Min. Credits 2
8	SCC	18	ME
	Min. Credits		Min. Credits 2
9	FC	19	ADDITIONAL
	Min. Credits 9		Min. Credits
10	SpecialCase		
	Min. Credits		


PROF I/C ACADEMICS

PRINCIPAL COE

DEAN ACADEMICS


HOD-ME
Dr. T. VIJAYA KUMAR 12/12/25
HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
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Green Fields, VADDESWAREM-522 302.

ASSOC. DEAN CURRICULUM

CONTROLLER OF EXAMINATIONS

SUMMARY
Y22 BATCH B.Tech ME EXIT REQUIREMENTS

Sl No	Category	Min Courses	Min Credits B.Tech. ME
1	Humanities & Social Sciences (HSS)	11	18
2	Basic Sciences (BS)	4	15.5
3	Engineering Sciences (ES)	11	30.5
4	Professional Core (PC)	12	40
5	Skill Development Core Courses (SDC)	3	6
6	Skill Development Electives (SDC ELEC)	1	2
7	Professional Elective 1 (PE1)	1	4
8	Professional Elective 2 (PE2)	1	3
9	Professional Elective 3 (PE3)	1	4
10	Professional Elective 4 (PE4)	1	3
11	Professional Elective 5 (PE5)	1	3
12	Flexi Core Courses (FXC)	3	9
13	Project Courses (PR)	5	14
14	Technical skilling (Tech.skill)	0	0
15	Physics Elective (PHY)	1	4
16	Chemistry Elective (CHE)	1	4
17	Open Elective	3	9
18	Foreign Language Elective (FLE)	1	2
19	Management Elective (ME)	1	2
20	Audit Courses (AUD)	7	0
21	Value Added Courses (VAC)	3	0
22	Sports Certification	1	0
GRAND TOTAL		73	173

B.Tech. ME

A specialization degree is awarded if a student "meets all requirements of B.Tech Mechanical Engineering with Specialization" and "acquires a minimum total of 173 credits with two additional credits being obtained from Basic Sciences, Professional Core or Professional Elective Course categories" and "take all professional electives from the same specialization".


Professor I/C
Academics


HOD-ME 12/12/25
Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, VADDESWAREM-522 302.

Principal-COE

SI No	SI No	CATEGORY	MIN. COURSES	MIN. CREDITS	COURSE CODE	COURSE TITLE	L	T	P	S	Cr	SPECIALIZATION
35	7	Professional Core (PC)	12	40	22ME2209R	KINEMATICS AND DYNAMICS OF MACHINES	2	1	2	0	4.00	
36	8				22ME3110R	HEAT TRANSFER	3	0	2	0	4.00	
37	9				22ME3111R	MECHANICAL ENGINEERING DESIGN	3	0	0	0	3.00	
38	10				22ME3113R	MANUFACTURING TECHNOLOGY	2	0	2	0	3.00	
39	11				22ME3112	THERMAL SYSTEMS ENGINEERING	3	0	2	0	4.00	
40	12	Skill Development Courses	4	8	22ME3214R	MACHINE DESIGN	2	0	0	4	3.00	
41	13				22ME3215	DIGITAL MANUFACTURING & ROBOTICS	3	0	0	0	3.00	
46	1				22SDME01R	VISUALIZATION AND MODELLING FOR ENGINEERING DESIGN	0	0	2	4	2.00	ENGINEERING DESIGN
47	2				22SDME02R	COMPUTER INTEGRATED MANUFACTURING	0	0	2	4	2.00	SMART MANUFACTURING
48	3				22SDME03R	FINITE ELEMENT ANALYSIS	0	0	2	4	2.00	ENGINEERING DESIGN
49	4	Flexi Core	3	9	22SDME05R	3D MODELLING AND DIGITAL PROTOTYPING	0	0	2	4	2.00	ENGINEERING DESIGN
50	5				22SDME06R	GEOMETRIC DIMENSIONING AND TOLERANCING	0	0	2	4	2.00	SMART MANUFACTURING
52	1				22ME2221	SUPPLY CHAIN AND QUALITY MANAGEMENT	3	0	0	0	3.00	
53	2				22ME2225	INTERNET OF THINGS	2	0	2	0	3.00	
54	3				22ME2226F	ELECTRIC VEHICLE TECHNOLOGY	3	0	0	0	3.00	
55	4	Professional Elective 1 (PE1)	1	4	22EC2223	FUNDAMENTALS OF ROBOTICS	2	0	2	0	3.00	
56	5				22CS2221	UX DESIGN	2	0	2	0	3.00	
57	1				22EGD3101R	MODELLING ANALYSIS & DESIGN OF ROBOTIC SYSTEMS	2	0	2	4	4.00	ENGINEERING DESIGN
58	2				22SMF3101R	REVERSE ENGINEERING AND RAPID PROTOTYPING	2	0	2	4	4.00	SMART MANUFACTURING
59	1				22EGD3202	CREEP, FATIGUE AND FRACTURE MECHANICS	3	0	0	0	3.00	ENGINEERING DESIGN
60	2	Professional Elective 2 (PE2)	1	3	22SMF3203	MODERN MANUFACTURING PROCESSES	3	0	0	0	3.00	SMART MANUFACTURING
61	1	Professional Elective 3 (PE3)	1	4	22EGD3304R	SUSTAINABLE DESIGN & SOCIAL INNOVATION IN ENGINEERING DESIGN	2	0	2	4	4.00	ENGINEERING DESIGN
62	2				22SMF3304R	SUSTAINABLE DESIGN & SOCIAL INNOVATION IN SMART MANUFACTURING	2	0	2	4	4.00	SMART MANUFACTURING

Dr. J. K. Kulkarni
HOD-Mechanical Engg
TAKSHI MAH EDUCATIONAL
VADGAON

Sl No	Sl No	CATEGORY	MIN. COURSES	MIN. CREDITS	COURSE CODE	COURSE TITLE	L	T	P	S	Gr	SPECIALIZATION
63	1	Professional Elective-4 (PE4)	1	3	22EGD3406M	MECHANICS OF COMPOSITE MATERIALS	3	0	0	0	3.00	ENGINEERING DESIGN
64	2				22SMF3405M	ROBOTICS & INDUSTRIAL AUTOMATION	3	0	0	0	3.00	SMART MANUFACTURING
65	1	Professional Elective-5 (PE5)	1	3	22EGD3507	ADVANCED STRENGTH OF MATERIALS	2	0	2	0	3.00	ENGINEERING DESIGN
66	2				22SMF3508	FLEXIBLE MANUFACTURING SYSTEMS	2	0	2	0	3.00	SMART MANUFACTURING
67	1	Project Courses (PR)	5	14	22IE2040	Social Internship	0	0	0	4	0.00	
68	2				22IE3041	Technical Internship	0	0	0	4	0.00	
69	3				22IE3043	TERM PAPER	0	0	4	0	2.00	
70	4				22IE4053R	ENGINEERING CAPSTONE PROJECT - PHASE 1	0	0	6	12	6.00	
71	5				22IE4054R	Engineering capstone project-Phase2	0	0	6	12	6.00	
72	1	Open Elective	3	9	OECE0001	ENVIRONMENTAL POLLUTION CONTROL METHODS	3	0	0	0	3.00	
73	2				OECE4224M	SELF DRIVING CARS	4	0	0	0	4.00	
74	3				OE-2	OPEN ELECTIVE-2	3	0	0	0	3.00	
75	4				OE-3	OPEN ELECTIVE-3	3	0	0	0	3.00	
76	1				22FL3062M	SPANISH	3	0	0	0	3.00	
77	2	Foreign Language Elective (FLE)	1	2	22FL3058	JAPANESE LANGUAGE	2	0	0	0	2.00	
78	1	Management Elective (ME)	1	2	22MB4068	FINANCIAL MANAGEMENT FOR ENGINEERS	2	0	0	0	2.00	
79	2				22MB4058M	SIX SIGMA YELLOW BELT	2	0	0	0	2.00	
80	1	Audit Courses (AUD)	7	0	21UC0013	GLOBAL LOGIC BUILDING CONTEST PRACTICUM	4	0	0	0	4.00	
81	2				21UC0014	GLOBAL LOGIC BUILDING CONTEST PRACTICUM	0	0	0	2	0.00	
82	3				21UC0015	GLOBAL LOGIC BUILDING CONTEST PRACTICUM	0	0	0	2	0.00	
83	4				22UC0008	INDIAN CONSTITUTION	0	0	0	2	0.00	
84	5				22UC0019	ESSENCE OF INDIAN KNOWLEDGE TRADITION	2	0	0	0	0.00	
85	6				22UC0016	Gender & Social Equality	2	0	0	0	0.00	
86	7				22UC0009	Ecology & Environment	2	0	0	0	0.00	
87	1	Value Added Courses (VAC)	3	0	21CC0032	AUTODESK FUSION 360	0	0	0	8	0.00	
88	2				21CC0006	AUTOCAD	0	0	0	8	0.00	
89	3				21CC0035	ANSYS	0	0	0	8	0.00	
90	4				21CC0037	3D MODELLING USING CATIA	0	0	0	8	0.00	
91	1	SPC	1	0	22SP2110	TENNIS	0	0	0	2	0.00	

Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
VJES, VADIES
Vadives, VADIES

SI No	SI No	CATEGORY	MIN. COURSES	MIN. CREDITS	COURSE CODE	COURSE TITLE	L	T	P	S	Cr	SPECIALIZATION
92	2				22SP2114	VOLLEYBALL	0	0	0	2	0.00	
					B.Tech. ME							
			73	173		A specialization degree is awarded if a student "meets all requirements of B.Tech Mechanical Engineering with Specialization" and "acquires a minimum total of 173 credits with two additional credits being obtained from Basic Sciences, Professional Core or Professional Elective Course categories" and "take all professional electives from the same specialization".						
GRAND												
ND												
IS MANDATORY AS PART OF GRADUATION REQUIREMENTS												

[Signature]

Professor I/C Academics

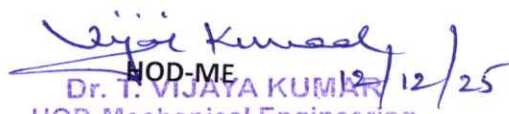
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HOD-ME 12/12/25

Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, VADDESWARAM-522302.

DEPARTMENT OF MECHANICAL ENGINEERING
B.TECH-MECHANICAL ENGINEERING For Y21 (Lateral) ADMITTED BATCH
Program Total Credits:134

1	mandatory	11	PE 6
	Min. Credits	95	Min. Credits
2	PE1	12	PE 7
	Min. Credits	4	Min. Credits
3	pe2	13	PE 8
	Min. Credits	3	Min. Credits
4	pe3	14	PE 9
	Min. Credits	4	Min. Credits
5	OE	15	PE 10
	Min. Credits	9	Min. Credits
6	PE4	16	OE4
	Min. Credits	3	Min. Credits
7	PE5	17	FL
	Min. Credits	3	Min. Credits
8	SCC	18	ME
	Min. Credits		Min. Credits
9	FC	19	ADDITIONAL
	Min. Credits	9	Min. Credits
10	SpecialCase		
	Min. Credits		


PROF I/C ACADEMICS


Dr. T. VIJAYA KUMAR
HOD-ME
HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, VADDESWAREM-522 302.

PRINCIPAL COE

ASSOC. DEAN CURRICULUM

DEAN ACADEMICS

CONTROLLER OF EXAMINATIONS

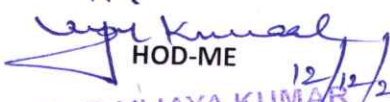
SUMMARY
Y21 BATCH B.Tech ME LATERAL ENTRY EXIT REQUIREMENTS

Sl No	Category	Min Courses	Min Credits B.Tech. ME
1	Humanities & Social Sciences (HSS)	8	12
2	Basic Sciences (BS)	2	8
3	Engineering Sciences (ES)	6	13
4	Professional Core (PC)	12	40
5	Skill Development Core Courses (SDC)	3	6
6	Skill Development Electives (SDC ELEC)	1	2
7	Professional Elective 1 (PE1)	1	4
8	Professional Elective 2 (PE2)	1	3
9	Professional Elective 3 (PE3)	1	4
10	Professional Elective 4 (PE4)	1	3
11	Professional Elective 5 (PE5)	1	3
12	Flexi Core Courses (FXC)	3	9
13	Project Courses (PR)	4	14
14	Technical skilling (Tech.skill)	0	0
15	Physics Elective (PHY)	0	0
16	Chemistry Elective (CHE)	0	0
17	Open Elective	3	9
18	Foreign Language Elective (FLE)	1	2
19	Management Elective (ME)	1	2
20	Audit Courses (AUD)	6	0
21	Value Added Courses (VAC)	3	0
22	Sports Certification	1	0
23	Bridge Courses	3	0
GRAND TOTAL		62	134

B.Tech. ME

A specialization degree is awarded if a student to a Lateral entry students if he/she "meets all requirements of B.Tech Mechanical Engineering with Specialization" and "acquires a minimum total of 134 credits with two additional credits being obtained from Basic Sciences, Professional Core or Professional Elective Course categories" and "take all professional electives from the same specialization".

Professor I/C
Academics


HOD-ME
12/12/25
Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, VADDESWAREM-522 302.

Principal-COE

Sl No	SI No	CATEGORY	MIN. COURSES	MIN. CREDITS	COURSE CODE	COURSE TITLE	L	T	P	S	Cr	SPECIALIZATION
32	1	Skill Development Courses	4	8	22SDME01R	VISUALIZATION AND MODELLING FOR ENGINEERING DESIGN	0	0	2	4	2.00	ENGINEERING DESIGN
33	2				22SDME02R	COMPUTER INTEGRATED MANUFACTURING	0	0	2	4	2.00	SMART MANUFACTURING
34	3				22SDME03R	FINITE ELEMENT ANALYSIS	0	0	2	4	2.00	ENGINEERING DESIGN
35	4				22SDME05R	3D MODELLING AND DIGITAL PROTOTYPING	0	0	2	4	2.00	ENGINEERING DESIGN
36	5				22SDME06R	GEOMETRIC DIMENSIONING AND TOLERANCING	0	0	2	4	2.00	ENGINEERING DESIGN
37	1	Flexi Core	3	9	22ME2221	SUPPLY CHAIN AND QUALITY MANAGEMENT	3	0	0	0	3.00	
38	2				22ME2225	INTERNET OF THINGS	2	0	2	0	3.00	
39	3				22ME2226F	ELECTRIC VEHICLE TECHNOLOGY	3	0	0	0	3.00	
40	4				22EC2223	FUNDAMENTALS OF ROBOTICS	2	0	2	0	3.00	
41	5				22CS2221	UX DESIGN	2	0	2	0	3.00	
42	1	Professional Elective 1 (PE1)	1	4	22EGD3101R	MODELLING ANALYSIS & DESIGN OF ROBOTIC SYSTEMS	2	0	2	0	3.00	
43	2				22SMF3101R	REVERSE ENGINEERING AND RAPID PROTOTYPING	2	0	2	4	4.00	ENGINEERING DESIGN
44	1	Professional Elective 2 (PE2)	1	3	22EGD3202	CREEP, FATIGUE AND FRACTURE MECHANICS	3	0	0	0	3.00	ENGINEERING DESIGN
45	2				22SMF3203	MODERN MANUFACTURING PROCESSES	3	0	0	0	3.00	ENGINEERING DESIGN
46	1	Professional Elective 3 (PE3)	1	4	22EGD3304R	SUSTAINABLE DESIGN & SOCIAL INNOVATION IN ENGINEERING DESIGN	2	0	2	4	4.00	ENGINEERING DESIGN
47	2				22SMF3304R	SUSTAINABLE DESIGN & SOCIAL INNOVATION IN SMART MANUFACTURING	2	0	2	4	4.00	ENGINEERING DESIGN
48	1	Professional Elective 4 (PE4)	1	3	22EGD3406M	MECHANICS OF COMPOSITE MATERIALS	3	0	0	0	3.00	ENGINEERING DESIGN
49	2				22SMF3405M	ROBOTICS & INDUSTRIAL AUTOMATION	3	0	0	0	3.00	ENGINEERING DESIGN
50	1	Professional Elective 5 (PE5)	1	3	22EGD3507	ADVANCED STRENGTH OF MATERIALS	2	0	2	0	3.00	ENGINEERING DESIGN
51	2				22SMF3508	FLEXIBLE MANUFACTURING SYSTEMS	2	0	2	0	3.00	ENGINEERING DESIGN
52	1	Project Courses	4	14	22IE3041	Technical Internship	0	0	0	4	0.00	
53	2				22IE3043	TERM PAPER	0	0	4	0	2.00	
54	3				22IE4053R	ENGINEERING CAPSTONE PROJECT - PHASE 1	0	0	6	12	6.00	
55	4				22IE4054R	ENGINEERING CAPSTONE PROJECT - PHASE 2	0	0	6	12	6.00	
56	1				OECE0001	ENVIRONMENTAL POLLUTION CONTROL METHODS	3	0	0	0	3.00	
57	2	Open Elective	3	9	OEEL4224M	SELF DRIVING CARS	4	0	0	0	4.00	
58	3				OE-2	OPEN ELECTIVE-2	3	0	0	0	3.00	
59	4				OE-3	OPEN ELECTIVE-3	3	0	0	0	3.00	
60	1	Foreign Language Elective (FLE)	1	2	22FL3062M	SPANISH	2	0	0	0	2.00	
61	2				22FL3058	JAPANESE LANGUAGE	2	0	0	0	2.00	
62	1	Management	1	2	22MB4068	FINANCIAL MANAGEMENT FOR ENGINEERS	2	0	0	0	2.00	

Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
(Deemed to be University)
Kottur Lakshminarayana Educational Foundation
Kottur, VADAPATHI-414M-35
Fields, VADAPATHI-414M-35

Sl No	SI No	CATEGORY	MIN. COURSES	MIN. CREDITS	COURSE CODE	COURSE TITLE	L	T	P	S	Cr	SPECIALIZATION
63	2	Elective (ME)			22MB4058	SIX SIGMA YELLOW BELT	4	0	0	0	4.00	
64	1	Audit Courses	6	0	21UC0014	GLOBAL LOGIC BUILDING CONTEST PRACTICUM	0	0	0	2	0.00	
65	2				21UC0015	GLOBAL LOGIC BUILDING CONTEST PRACTICUM	0	0	0	2	0.00	
66	3				22UC0008	INDIAN CONSTITUTION	2	0	0	0	0.00	
67	4				22UC0019	ESSENCE OF INDIAN KNOWLEDGE TRADITION	2	0	0	0	0.00	
68	5				22UC0016	Gender & Social Equality	2	0	0	0	0.00	
69	6				22UC0009	Ecology & Environment	2	0	0	0	0.00	
74	1	Value Added Courses (VAC)	3	0	21CC0032	AUTODESK FUSION 360	0	0	0	8	0.00	
75	2				21CC0035	ANSYS	0	0	0	8	0.00	
76	3				21CC0037	3D MODELLING USING CATIA	0	0	0	8	0.00	
77	4				21CC0031	PROGRAMMING USING PYTHON	0	0	0	8	0.00	
78	5				21CC0006	AUTOCAD	0	0	0	8	0.00	
79	1	SPC	1	0	22SP2110	TENNIS	0	0	0	8	0.00	
80	2				22SP2114	VOLLEYBALL	0	0	0	2	0.00	
81	3				22SP2103	BADMINTON	0	0	0	2	0.00	
82	4				22SP2102	BASKETBALL	0	0	0	2	0.00	
83	5				22SP2104	CRICKET	0	0	0	2	0.00	
					B.Tech. ME							
			62	134	A specialization degree is awarded if a student to a Lateral entry students if he/she "meets all requirements of B.Tech Mechanical Engineering with Specialization" and "acquires a minimum total of 134 credits with two additional credits being obtained from Basic Sciences, Professional Core or Professional Elective Course categories" and "take all professional electives from the same specialization".							
GRA					IS MANDATORY AS PART OF GRADUATION REQUIREMENTS							
ND												

[Signature]

Professor I/C Academics

[Signature]
HOD-ME 12/12/25

Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, VADDESWARAM-522 301

DEPARTMENT OF MECHANICAL ENGINEERING
B.TECH-MECHANICAL ENGINEERING For Y22 (HONORS WITH SPECIALIZATION)
ADMITTED BATCH

Program Total Credits:198

1	mandatory	11	PE 6
	Min. Credits	155	Min. Credits
2	PE1	12	PE 7
	Min. Credits	6	Min. Credits
3	pe2	13	PE 8
	Min. Credits	3	Min. Credits
4	pe3	14	PE 9
	Min. Credits	6	Min. Credits
5	OE	15	PE 10
	Min. Credits	9	Min. Credits
6	PE4	16	OE4
	Min. Credits	3	Min. Credits
7	PE5	17	FL
	Min. Credits	3	Min. Credits
8	SCC	18	ME
	Min. Credits		Min. Credits
9	FC	19	ADDITIONAL
	Min. Credits	9	Min. Credits
10	SpecialCase		
	Min. Credits		


PROF I/C ACADEMICS

PRINCIPAL COE

DEAN ACADEMICS


HOD-ME
Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, VADDESWAREM-522 302
12/12/25

ASSOC. DEAN CURRICULUM

CONTROLLER OF EXAMINATIONS

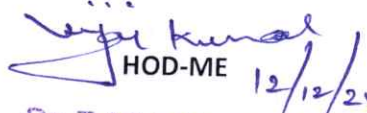
SUMMARY
Y22 BATCH B.Tech ME HONORS WITH SPECIALIZATION EXIT REQUIREMENTS

Sl No	Category	Min Courses	Min Credits B.Tech. ME
1	Humanities & Social Sciences (HSS)	11	18
2	Basic Sciences (BS)	4	15.5
3	Engineering Sciences (ES)	11	30.5
4	Professional Core (PC)	14	55
5	Skill Development Core Courses (SDC)	3	10
6	Skill Development Electives (SDC ELEC)	1	4
7	Professional Elective 1 (PE1)	1	6
8	Professional Elective 2 (PE2)	1	3
9	Professional Elective 3 (PE3)	1	6
10	Professional Elective 4 (PE4)	1	3
11	Professional Elective 5 (PE5)	1	3
12	Flexi Core Courses (FXC)	3	9
13	Project Courses (PR)	5	14
14	Technical skilling (Tech.skill)	0	0
15	Physics Elective (PHY)	1	4
16	Chemistry Elective (CHE)	1	4
17	Open Elective	3	9
18	Foreign Language Elective (FLE)	1	2
19	Management Elective (ME)	1	2
20	Audit Courses (AUD)	7	0
21	Value Added Courses (VAC)	4	0
22	Sports Certification	1	0
GRAND TOTAL		76	198

B.Tech. ME

A honors degree is awarded if a student "meets all requirements of a B.Tech Mechanical with Specialization degree" and "acquires a total of minimum 198 credits by taking courses highlighted above with A or P suffix in the course codes" and "takes up advanced project in a multi-disciplinary domain" and "secures a minimum CGPA of 8.5" and "has no history of F grade or DT grade in any course".


Professor I/C
Academics


HOD-ME 12/12/21
Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, VADDESWAREM-522 302.

Principal-COE

Y22 BATCH B.Tech. ME HONORS WITH SPECIALIZATION EXIT REQUIREMENTS

Sl No	Si No	CATEGORY	MIN. COURSES	MIN. CREDITS	COURSE CODE	COURSE TITLE	L	T	P	S	Cr	SPECIALIZATION
1	1	Humanities & Social Sciences (HSS)	11	18	22UC1101	INTEGRATED PROFESSIONAL ENGLISH	0	0	4	0	2.00	
2	2				22UC1202	ENGLISH PROFICIENCY	0	0	4	0	2.00	
3	3				22UC2103	ESSENTIAL SKILLS FOR EMPLOYABILITY	0	0	4	0	2.00	
4	4				22UC2204	CORPORATE READINESS SKILLS	0	0	4	0	2.00	
5	5				22UC0021	SOCIAL IMMERSIVE LEARNING	0	0	4	0	2.00	
6	6				22UC0022	SOCIAL IMMERSIVE LEARNING - II	0	0	0	4	1.00	
7	7				22UC0023	SOCIAL IMMERSIVE LEARNING	0	0	0	4	1.00	
8	8				22UC0024	SOCIAL IMMERSIVE LEARNING	0	0	0	4	1.00	
9	9				22UC0010	UNIVERSAL HUMAN VALUES AND PROFESSIONAL ETHICS	0	0	0	4	1.00	
10	10				22UC1203	DESIGN THINKING AND INNOVATION	2	0	0	0	2.00	
12	1	Basic Sciences (BS)	6	23.5	22UC0012M	INNOVATION MANAGEMENT	0	0	4	0	2.00	
13	2				22MT1101	MATHEMATICS FOR COMPUTING	0	0	4	0	2.00	
14	3				22MT2102	MATHEMATICS FOR ENGINEERS	2	2	0	2	4.50	
15	4				22MT2011	OPTIMIZATION TECHNIQUES	2	1	0	0	3.00	
16	5				22MT2010	COMPUTATIONS IN APPLIED MECHANICS AND STATISTICS	2	2	0	0	4.00	
17	6				22CY1001	ENGINEERING CHEMISTRY	2	2	0	0	4.00	
18	1				22PH1010	MECHANICS	3	0	2	0	4.00	
19	2				22ME1103	DESIGN TOOL WORKSHOP	3	1	0	0	4.00	
21	4				22SC1101	COMPUTATIONAL THINKING FOR STRUCTURED DESIGN	0	0	4	0	2.00	
22	5				22SC1202	DATA STRUCTURES	3	0	2	6	5.50	
23	6	Engineering Sciences (ES)	11	30.5	22SC1209	IOT WORKSHOP	3	0	2	4	5.00	
24	7				22ME1002	ENGINEERING GRAPHICS & 2D MODELLING	0	0	4	0	2.00	
25	8				22EE2105	BASIC ELECTRICAL AND ELECTRONIC CIRCUITS	1	0	4	0	3.00	
26	9				22ME2204	WORKSHOP PRACTICES FOR ENGINEERS	2	0	0	0	2.00	
27	10				22UC3108	PROBLEM SOLVING AND REASONING SKILLS-1	0	0	4	0	2.00	
					22CS1201	OBJECT ORIENTED PROGRAMMING	0	0	0	4	1.00	
					22CE2102	FLUID MECHANICS AND HYDRAULIC MACHINES	2	0	2	0	3.00	
28	11				22UC3209	PROBLEM SOLVING AND REASONING SKILLS-2	3	0	2	0	4.00	
29	1				22AD2001P	DATA DRIVEN ARTIFICIAL INTELLIGENT SYSTEMS	0	0	0	4	1.00	
31	3				22ME2105	MATERIAL SCIENCE & METALLURGY	3	0	4	0	5.00	
32	4				22ME2106R	SOLID MECHANICS	2	0	2	0	3.00	
33	5				22ME2107	THERMODYNAMICS	3	0	2	0	4.00	
34	6				22ME2208	MANUFACTURING PROCESSES	3	0	0	0	3.00	
							2	0	2	0	3.00	

Approved by
Dr. P. V. JAYAKUMAR
HOD-Technical Education
(Deemed to be University)
Kongu Engineering College
Kongu, VADDESWARAM

Sl No	SI No	CATEGORY	MIN. COURSES	MIN. CREDITS	COURSE CODE	COURSE TITLE	L	T	P	S	Cr	SPECIALIZATION
35	7	Professional Core (PC)	14	55	22ME2209A	KINEMATICS AND DYNAMICS OF MACHINES	3	1	4	0	6.00	
36	8				22ME3110A	HEAT TRANSFER						
37	9				22ME3111R	MECHANICAL ENGINEERING DESIGN	4	0	4	0	6.00	
38	10				22ME3113A	MANUFACTURING TECHNOLOGY	3	0	0	0	3.00	
39	11				22ME3112	THERMAL SYSTEMS ENGINEERING	3	0	4	0	5.00	
40	12				22ME3214R	MACHINE DESIGN	3	0	2	0	4.00	
					22ME3215	DIGITAL MANUFACTURING & ROBOTICS	2	0	0	4	3.00	
		Skill Development Courses	4	14	22ME4216M	POWER PLANT SYSTEM ENGINEERING	3	0	0	0	3.00	
41	13				22ME4217M	ROBOTICS AND CONTROL: THEORY AND PRACTICE	3	0	0	0	3.00	
46	1				22SDME01A	VISUALIZATION AND MODELLING FOR ENGINEERING DESIGN	4	0	0	0	4.00	
47	2				22SDME02A	COMPUTER INTEGRATED MANUFACTURING	0	0	6	4	4.00	ENGINEERING DESIGN
48	3				22SDME03R	FINITE ELEMENT ANALYSIS	0	0	6	4	4.00	SMART MANUFACTURING
49	4				22SDME05A	3D MODELLING AND DIGITAL PROTOTYPING	0	0	2	4	2.00	ENGINEERING DESIGN
					22SDME06A	GEOMETRIC DIMENSIONING AND TOLERANCING	0	0	6	4	4.00	ENGINEERING DESIGN
50	5	Flexi Core	3	9	22SDCS07A	CLOUD BASED AI/ML SPECIALITY	0	0	6	4	4.00	SMART MANUFACTURING
52	1				22ME2221	SUPPLY CHAIN AND QUALITY MANAGEMENT	0	0	6	4	4	ARTIFICIAL INTELLIGENCE & INTELLIGENT PROCESS
53	2				22ME2225	INTERNET OF THINGS	3	0	0	0	3.00	
54	3				22ME2226F	ELECTRIC VEHICLE TECHNOLOGY	2	0	2	0	3.00	
55	4				22EC2223	FUNDAMENTALS OF ROBOTICS	3	0	0	0	3.00	
56	5				22CS2221	UX DESIGN	2	0	2	0	3.00	
					22AD2223F	SOFT COMPUTING	2	0	2	0	3.00	
57	1	Professional Elective 1 (PE1)	1	6	22EGD3101A	MODELLING ANALYSIS & DESIGN OF ROBOTIC SYSTEMS	2	0	2	0	3.00	
					22SMF3101A	REVERSE ENGINEERING AND RAPID PROTOTYPING	3	0	4	4	6.00	ENGINEERING DESIGN
					22AIP3101A	MACHINE LEARNING	3	0	4	4	6.00	SMART MANUFACTURING
58	2											ARTIFICIAL INTELLIGENCE & INTELLIGENT PROCESS AUTOMATION
					22EGD3202	CREEP, FATIGUE AND FRACTURE MECHANICS	3	0	0	0	3.00	ENGINEERING DESIGN
59	1											


 HOD - Mechanical Engineering
 K. J. Somaiya Institute of Engineering & Technology
 Vasai, Mumbai - 401 202
 Deemed to be University
 Approved by UGC
 K. J. Somaiya Institute of Engineering & Technology
 Vasai, Mumbai - 401 202

Sl No	SI No	CATEGORY	MIN. COURSES	MIN. CREDITS	COURSE CODE	COURSE TITLE	L	T	P	S	Cr	SPECIALIZATION
		Professional Elective 2 (PE2)	1	3	22SMF3203	MODERN MANUFACTURING PROCESSES	3	0	0	0	3.00	SMART MANUFACTURING
60	2				22AIP3204	ARTIFICIAL NEURAL NETWORKS	3	0	0	0	3.00	ARTIFICIAL INTELLIGENCE & INTELLIGENT PROCESS AUTOMATION
61	1				22EGD3304A	SUSTAINABLE DESIGN & SOCIAL INNOVATION IN ENGINEERING DESIGN	3	0	4	4	6.00	ENGINEERING DESIGN
		Professional Elective 3 (PE3)	1	6	22SMF3304A	SUSTAINABLE DESIGN & SOCIAL INNOVATION IN SMART MANUFACTURING	3	0	4	4	6.00	SMART MANUFACTURING
62	2				22AIP3305A	DEEP LEARNING	3	0	4	4	6.00	ARTIFICIAL INTELLIGENCE & INTELLIGENT PROCESS AUTOMATION
63	1				22EGD3406M	MECHANICS OF COMPOSITE MATERIALS	3	0	0	0	3.00	ENGINEERING DESIGN
		Professional Elective 4 (PE4)	1	3	22SMF3405M	ROBOTICS & INDUSTRIAL AUTOMATION	3	0	0	0	3.00	SMART MANUFACTURING
64	2				22AIP3407M	PERCEPTION AND COMPUTER VISION	3	0	0	0	3.00	ARTIFICIAL INTELLIGENCE & INTELLIGENT PROCESS AUTOMATION
65	1				22EGD3507	ADVANCED STRENGTH OF MATERIALS	2	0	2	0	3.00	ENGINEERING DESIGN
		Professional Elective 5 (PE5)	1	3	22SMF3508	FLEXIBLE MANUFACTURING SYSTEMS	2	0	2	0	3.00	SMART MANUFACTURING
66	2				22AIP3510	NATURAL LANGUAGE PROCESSING	2	0	2	0	3.00	ARTIFICIAL INTELLIGENCE & INTELLIGENT PROCESS AUTOMATION
67	1				22IE2040	SOCIAL INTERNSHIP	0	0	0	4	0.00	
68	2				22IE3041	TECHNICAL INTERNSHIP	0	0	0	4	0.00	
69	3	Project Courses (PR)	5	14	22IE3043	TERM PAPER	0	0	4	0	2.00	
70	4				22IE4053A	ENGINEERING CAPSTONE PROJECT - PHASE 1	0	0	8	16	8.00	
71	5				22IE4054A	ENGINEERING CAPSTONE PROJECT - PHASE 2	0	0	8	16	8.00	
72	1				OEE0001	ENVIRONMENTAL POLLUTION CONTROL METHODS	3	0	0	0	3.00	
73	2	Open Elective	3	9	OEEE4224M	SELF DRIVING CARS	4	0	0	0	4.00	

Dr. J. V. Lakshmi
HOD-Mechanical Engineering
K. J. Somaiya Institute of Engineering & Information Technology
Warananagar, Vadodra, Gujarat

Vaddeswaram
8-12-2025

To,
HOD Sir,
KL University,
Vaddeswaram.

Subject :- Requesting Permission to allow to write supply exam

Sir,

I am N. Praveenkumar with ID no - 170070255 of Y17 batch
with department Mechanical

I was completed my 4 years course and with extra 4 years
it was 8 years completed till now so I was not able to
write supply Design and Manufacturing - II so please give
me permission to write the supply exam of
Design and manufacturing II (17ME 3219). and to permit to
Pay the supply fees to this subject

Sir, Forwarded for your
Kind Consideration

Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, VADDESWAREM-522 302.

Yours faithfully,
N. Praveenkumar
170070255

Dr. T. PANTHIMATHI