ANNEXURE 2

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2.1.2 State the delivery details of the content beyond the syllabus for the attainment of POs & PSOs

Steps taken to get identified gaps included in the curriculum. (letter to university/BOS)

The identified curriculum gaps have been formally submitted to the Chairperson of the University Board of Studies (BoS) for syllabus revision and necessary updates. To address the identified gaps, the University's BoS Chairperson has been requested to review and update the syllabus accordingly.

ATRIA INSTITUTE OF TECHNOLOGY

Dr . VENKATEGOWDA C <mechhod@atria.edu>

Feedback on Introduction to Modelling and Design for Manufacturing (Course Code - BMEL305) syllabus from Atria Institute of Technology - Reg

3 messages

Dr . VENKATEGOWDA C <mechhod@atria.edu> Mon, Oct 14, 2024 at 5:28 PM
To: bos@vtu.ac.in
Cc: re@vtu.ac.in, rv@vtu.ac.in

Dear Sir,

I hope this email finds you well. I am writing to share feedback on the **Introduction to Modelling and Design for Manufacturing (Course Code - BMEL305) syllabus** from **Atria Institute of Technology, Anandnagar, Bengaluru - 24.** I reviewed the current syllabus and have provided some valuable insights that I believe will be beneficial for enhancing the course content.

Feedback Highlights:

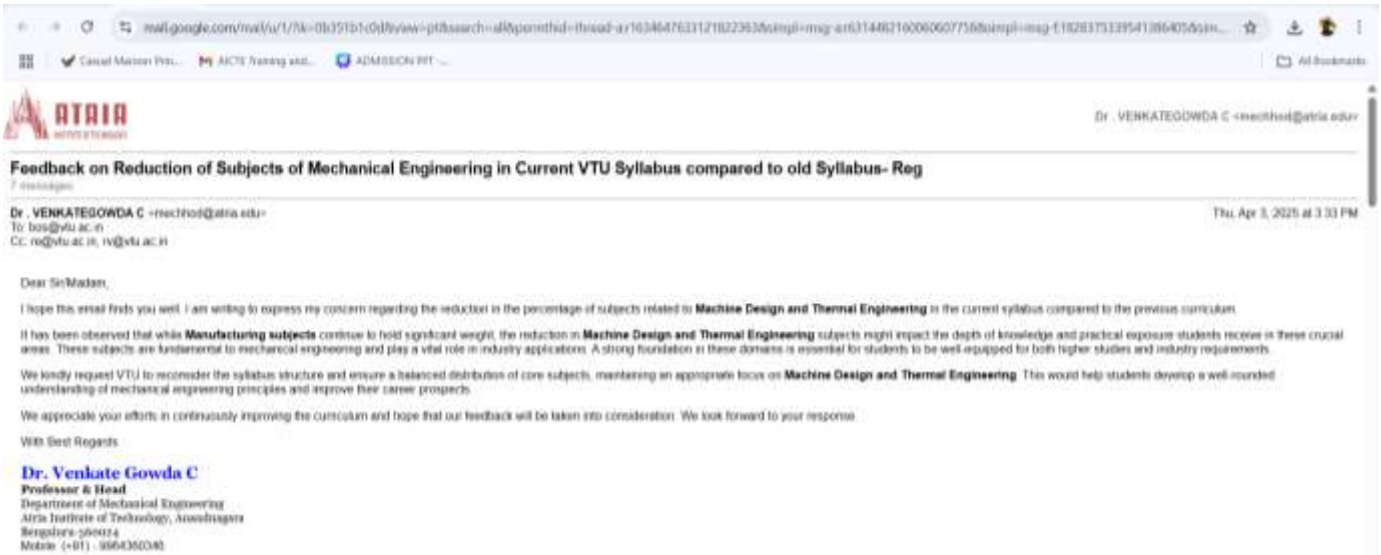
1. **Content Coverage:** Content incorporated in the syllabus is industry related but it seems to be very huge for the student to complete the course with only one credit.
2. **Practical Application:** Manual is very huge, 430+ pages and students may find it difficult to go through it.
3. **Pacing and Structure:** Structure of the syllabus is very good and there is a continuity in the practicing of Drawings and designing the Models.
4. **Assessment Methods:** In the assessment method, CIE is only limited for the test conduction, and can also be extended for continuous evaluation of students in each and every class.

The professor believes that these adjustments will not only make the course more relevant but also enhance the overall learning experience for students. We kindly request you to consider these suggestions for the upcoming semester.

Thank you for your attention to this feedback. We look forward to your positive response and any further guidance you may have.

With Best Regards

Dr. Venkate Gowda C
Professor & Head
Department of Mechanical Engineering
Atria Institute of Technology, Anandnagara
Bengaluru-560024
Mobile: (+91) - 9964360346



ATRIA INSTITUTE OF TECHNOLOGY

Dr . VENKATEGOWDA C <mechhod@atria.edu>

Feedback on Reduction of Subjects of Mechanical Engineering in Current VTU Syllabus compared to old Syllabus- Reg

7 messages

Dr . VENKATEGOWDA C <mechhod@atria.edu> Thu, Apr 3, 2025 at 3:33 PM
To: bos@vtu.ac.in
Cc: re@vtu.ac.in, rv@vtu.ac.in

Dear Sir/Madam,

I hope this email finds you well. I am writing to express my concern regarding the reduction in the percentage of subjects related to **Machine Design and Thermal Engineering** in the current syllabus compared to the previous curriculum.

It has been observed that while **Manufacturing subjects** continue to hold significant weight, the reduction in **Machine Design and Thermal Engineering** subjects might impact the depth of knowledge and practical exposure students receive in these crucial areas. These subjects are fundamental to mechanical engineering and play a vital role in industry applications. A strong foundation in these domains is essential for students to be well-equipped for both higher studies and industry requirements.

We kindly request VTU to reconsider the syllabus structure and ensure a balanced distribution of core subjects, maintaining an appropriate focus on **Machine Design and Thermal Engineering**. This would help students develop a well-rounded understanding of mechanical engineering principles and improve their career prospects.

We appreciate your efforts in continuously improving the curriculum and hope that our feedback will be taken into consideration. We look forward to your response.

With Best Regards

Dr. Venkate Gowda C
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Bengaluru-560024
Mobile: (+91) - 9964360346

ATRIA INSTITUTE OF TECHNOLOGY

Dr . VENKATEGOWDA C <mechhod@atria.edu>

Feedback on Heat Transfer Subject (BME601) of Mechanical Engineering– 2022 Scheme - Reg

3 messages

Dr . VENKATEGOWDA C <mechhod@atria.edu> Thu, Apr 3, 2025 at 3:49 PM
To: bos@vtu.ac.in, re@vtu.ac.in, rv@vtu.ac.in

Dear Sir/Madam,

I hope this email finds you well. I am writing to provide feedback regarding the **Heat Transfer (BME601)** subject under the **2022 Scheme** at Visvesvaraya Technological University (VTU).

While the subject is essential for understanding fundamental thermal engineering concepts, we have observed certain areas where improvements could enhance the learning experience:

1. **Syllabus Coverage:** Some topics feel rushed due to time constraints, while others may need better alignment with industry applications.
2. **Reference Materials:** The prescribed textbooks could be supplemented with additional resources or practical case studies.
3. **Laboratory Integration:** More emphasis on practical demonstrations and simulations could help in better understanding.

We appreciate the efforts of VTU in continuously improving the curriculum and hope these suggestions are taken into consideration. Kindly let us know if any further details are required.

Thank you for your time and consideration.

With Best Regards

Dr. Venkate Gowda C
Professor & Head
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Mobile: (+91) - 9964360346

Delivery details of content beyond syllabus – CAY

Table 1: Programs conducted for Content beyond syllabus, 2024 - 25

Sl.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	%of Students	Relevance to POs, PSOs
1	Advancements in Manufacturing Technology (Thermal/ Design/ Manufacturing)	**Guest lecture** "*Automotive crashworthiness: An occupant safety*"	24/04/2025	Mr. Shashank Gowda Engineer, Vehicle integration & safety analysis, TCS	95	PO3, PO5 PO6, PO9, PSO1,PSO3
		Guest lecture "*Recent trend of Design engineers in manufacturing sector* "	22/05/2025	Mr. Rohith Moses Prasad Trainer, Jnana InfoTech	90	PO1, PO4, PO6, PO7, PO9, PO12, PSO3
		Guest lecture *"Digital Transformations of Manufacturing solutions and its roadmap"*	06/03/2025	Mr. Vishnu S Senior Engineer, Indishtech pvt. ltd	87	PO6, PO7, PO10, PSO1, PSO2,PSO3
		Guest lecture *"BIM modelling & industrial automation"*	20/02/2025	Mr. Shibu Poulose Trainer, Gulftech LLP	92	PO1, PO4, PO6, PO7
		Industrial Trip Deccan Hydraulics , KGF	17/05/2025	Industrial visit Coordinator, Dept of ME	93	PO6, PO7, PO10, PO8, PSO1, PSO2,PSO3
2	Modelling/ Simulation Skills (Design/ Manufacturing)	**5-day Workshop** *"Fluid dynamics and CFD – A practical introduction"*	05/05/2025 to 09/05/2025	Mr. Sreenivas Saurab Kumar Research scholar, IISC	88	PO6, PO7, PO10, PSO1, PSO2,PSO3
3	EV/Hybrid Tech. in Automobile Engg. (Automobile)	**Guest lecture** *"Decoding EV Architecture"*	03/04/2025	Mr. Kishore Kumar R Engineer ,Tekwork pvt.ltd	90	PO3, PO5 PO6, PO9, PSO1,PSO3
		Guest lecture *"Strategy from graduate to mobility design engineer"*	20/03/2025	Mr. Satish Ullatil Co-founder, Leameng solution technologies	93	PO6, PO7, PO10, PSO1, PSO2,PSO3
		Guest lecture *"Innovative design and modelling with CATIA & SolidWorks for E-mobility"*	7/11/2024	Mr. Abhishek V Trainer, SPP Tech	87	PO1, PO4, PO5, PO6, PO7, PO9, PO12, PSO3

4	Industry 4.0 - Smart Manufacturing (Manufacturing/ Multidisciplinary)	**Guest lecture** *"Role of Mechanical engineers at enterprise level in Industrial automation"*	27/02/2025	Mr. Sharath C K Buisness development officer, Smart Autotech PLM	90	PO3, PO5 PO6, PO9 PO10, PSO1,PSO3
		Guest lecture *"The impact of AI on Robotics & Autonomous systems in engineering"*	25/10/2024	Dr. M S Rajendra Kumar Professor, CIT Tumkur	88	PO1, PO4, PO6, PO7, PO9, PO12, PSO3
		Guest lecture *"Paperless shop floor and need of digitization in manufacturing"*	5/09/2024	Mr. Panish Dudda Co-founder, Loginware Softtec pvt. ltd	92	PO3, PO5 PO6, PO9, PSO1,PSO3
		Guest lecture *"Career guidance on Data Analytics"*	21/11/2024	Mr. Maheshwar Narayanan Assistant vice president, Imarticus learning	86	PO3, PO5 PO6, PO9, PSO1,PSO3
		Industrial Vsit *"KIOCL Industry visit, Mangalore"*	8/11/2024	Industrial visit Coordinator, Dept of ME	93	PO6, PO7, PO10, PSO1, PSO2,PSO3
5	Career Guidance (Placements/ Higher studies)	**Guest lecture** *"Exploring career opportunities for engineering graduates"*	15/05/2025	Mr. K Chandapillai Senior officer training, NTTF	90	PO1, PO6, PO8, PO10,PO12
		Webinar *"Study ABROAD your path to higher education in Germany"*	28/11/2024	Mr. Vishal Sanjay Shivam	90	PO1, PO6, PO8, PO10,PO12

Guest Lecture on "**Automotive Crashworthiness: An Overview of Occupant Safety**" by Mr. Shashank Gowda on 24/04/2025

Delivery details of content beyond syllabus – CAYm1

Table 2: Programs conducted for Content beyond syllabus, 2023 - 24

Sl.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	%of Students	Relevance to POs, PSOs
1	Advancements in Manufacturing Technology (Thermal/ Design/ Manufacturing)	**Guest lecture** "*3D printing, its trends and importance of Additive Manufacturing*"	13/12/2023	Mr. Garvit Garg CEO & Director, Eduphoenix	90	PO1, PO5 PO6, PO9, PSO1,PSO3
		Guest lecture "*Product life cycle management* "	27/02/2024	Mr. Sagar Roshan Kumar	88	PO3, PO5 PO6, PO9, PSO1,PSO3
		Industrial Trip "*ACE Designers*"	27/07/2024	Industrial visit Coordinator, Dept of ME	92	PO6, PO7, PO10, PSO1, PSO2,PSO3
2	Modelling/ Simulation Skills (Design/ Manufacturing)	**Guest lecture** *"Application of a CAE/FEA Engineer"*	03/01/2024	Mr. Hanuma Naik Founder, RMS-Tech	86	PO4, PO5 PO6, PO7,PSO1
		Guest lecture *"Creating modelling components using SolidWorks"*	24/01/2024	Mr. Abhishek V Trainer, Jnana Infotech	93	PO4, PO5 PO6, PO7,PSO1
		Guest lecture *"Activity on Application of Beams in Aircraft"*	16/08/2023	Ms. Anuksha L Autoliv India pvt. ltd	90	PO4, PO5 PO6, PO7,PSO1
		Webinar *"Activity on Structural Symphonics - The art of shear force and bending moment"*	01/08/2023	Mr. Deepak Menon Maters student at University of Rostock, Germany	90	PO4, PO5 PO6, PO7,PSO1
3	EV/Hybrid Tech. in Automobile Engg. (Automobile)	**Guest lecture** *"Electric mobility"*	20/06/2024	Vijay Hiremath Service Head, Greaves electric mobility,	84	PO3, PO5 PO6, PO9, PSO1,PSO3
		Webinar *"National webinar on Basics of liquid storage tank and its manufacturing"*	18/10/2023	Mr. Ankur Vagh Deputy Manager, Adani hazira port ltd	92	PO1, PO4, PO5 PO6, PO9, PSO1,PSO3

4	Industry 4.0 - Smart Manufacturing (Manufacturing/ Multidisciplinary)	**Guest lecture** *"Introduction to Industrial IOT"*	18/04/2024	Dr. Ravichandra K R Professor, BMSIT	93	PO1, PO4, PO5 PO6, PO9, PSO1,PSO3
		Guest lecture *"Development in design and automation for industry 4.0"*	03/04/2024	Mr. Vinay S Manager, Conceptia Konnect	88	PO1, PO4, PO5, PO6, PSO3
		Guest lecture *"Automation & Robotics"*	30/05/2024	Mr. Srinivas Prabhu Co-founder, Incanto dynamics	90	PO1, PO4, PO6, PO7
		Industrial Trip *"Rittal Pvt ltd. Doddaballapura"*	15/11/2023	Industrial visit Coordinator, Dept of ME	93	PO6, PO7, PO8, PO10, PSO1, PSO2,PSO3
5	Career Guidance (Placements/ Higher studies)	**Guest lecture** *"Placement opportunities in the field of design"*	14/02/2024	Mr. Vinay S Manager, Conceptia Konnect	90	PO1, PO6, PO7, PO10,PO12
		Guest lecture *"Communication skill for successful carrier"*	17/01/2024	Mrs. Indrayani Salunhe	87	PO1, PO6, PO7, PO10,PO12
		Guest lecture *"Exclusive prospect of career counselling & innovative abroad educational programs"*	27/06/2024	Mr. Anupam Dubey BDM, Texas review	92	PO1, PO6, PO7, PO10, PO12,
		Guest lecture *"Global Education Awareness"*	16/12/2023	Mr. Abhilash BDM, Nestling	83	PO1, PO6, PO7, PO10,PO12

Guest Lecture on "**Development in design and automation for industry 4.0**" by Mr. Vinay S on 03/04/2024

Delivery details of content beyond syllabus – CAYm2

Table 3: Programs conducted for Content beyond syllabus, 2022 - 23

Sl.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	%of Students	Relevance to POs, PSOs
1	Advancements in Manufacturing Technology (Thermal/ Design/ Manufacturing)	**Guest lecture** *"Activity on Latest Technologies in Factory Automation and Robotics"*	14/12/2022	Mr. Muthu Krishnan G BDM, Fanuc India pvt. ltd	90	PO3, PO5 PO6, PO9, PSO1,PSO 3
		Guest lecture "*Growth of Mechanical Engineering post Pandemic* "	17/05/2023	Rakesh G Badiger Lead Engineer, ACE designers	88	PO1, PO4, PO6, PO7,PSO1
		Guest lecture "*Entrepreneurship opportunities in Agri and Allied Sector*"	19/10/2022	Mr. Ashvik K S BDM, NAAVIC Agritech	91	PO1, PO4, PO5 PO6, PO7,PSO1
		Certification Program *"Certification courses on German Language and Python"*	03/042023	Mr. Santosh B D	94	PO3, PO4, PO5, PSO3
		Industrial Trip "*ACE Designers*"	27/07/2024	Industrial visit Coordinator, Dept of ME	92	PO6, PO8, PO10, PSO1, PSO2,PSO 3
2	Career Guidance (Placements/ Higher studies)	**Guest lecture** *"Preplacement program on Technical profile building"*	08/03/2023	Mark Brandon Vemnum BTL Head, IMARTICUS learning	86	PO1, PO6, PO7, PO10,PO1 2
		Webinar *"Activity on Higher study in Abroad and Preparation"*	18/01/2023	Mr. Vishal Sanjay Shivam Master's at Bauhaus university, Germany	90	PO1, PO6, PO7, PO10,PO1 2
		Guest lecture *"Carrier Advice for Masters in Finland"*	19/04/2023	Mr. Jeevan Reddy Founder, THE HOPE	92	PO6, PO7 PO12
		Webinar *"Activity on Higher study in Abroad and Preparation"*	18/01/2023	Mr. Vishal Sanjay Shivam Master's at Bauhaus university, Germany	88	PO6, PO7 PO12

Guest Lecture on "**Activity on Latest Technologies in Factory Automation and Robotics**" by Mr. Muthu Krishnan G on 14/12/2022

Mapping of content beyond Syllabus with the PO's & PSO's

Table 4: Mapping of content beyond Syllabus with the PO's & PSO's

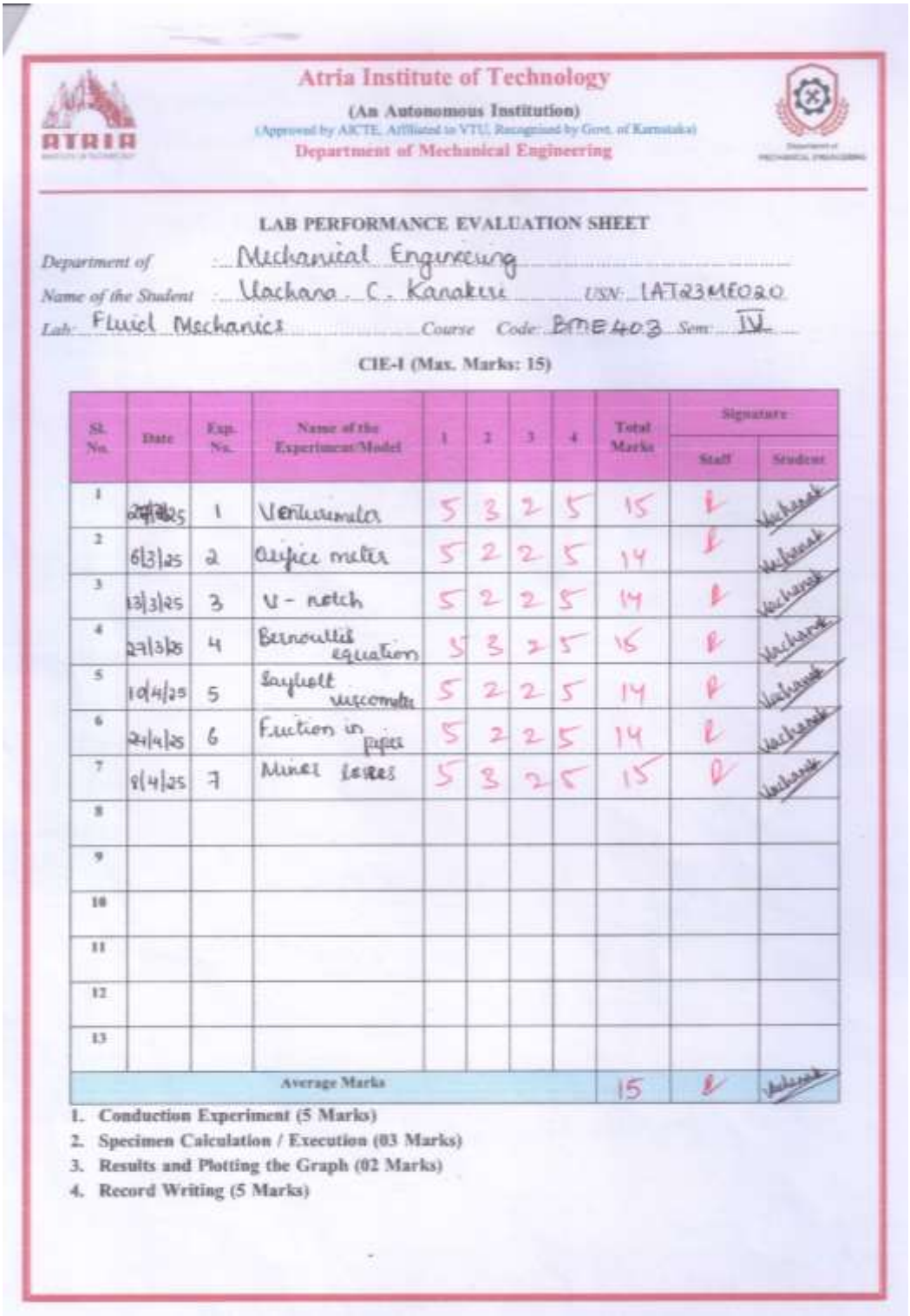
POs & PSOs / Topics	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
Guest lectures	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Workshops	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Innovative Projects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Industrial Visits		✓	✓	✓		✓	✓	✓					✓	✓	✓
Pre-Placement Training	✓	✓	✓					✓	✓	✓			✓	✓	✓
Training on Soft skills						✓	✓	✓	✓	✓		✓			✓

2.2.1 Describe the Process followed to improve quality of Teaching Learning

The Peer team visited have given the following observation.

- "Weak Continuous Assessment"

Every Lab follows the below format for continuous assessment of Lab performance. At completion of each experiment the performance sheet is evaluated.



Atria Institute of Technology

(An Autonomous Institution)

(Approved by AICTE, Affiliated to VTU, Recognized by Govt. of Karnataka)

Department of Mechanical Engineering

LAB PERFORMANCE EVALUATION SHEET

Department of Mechanical Engineering

Name of the Student Uachana. C. Kanakeri USN: 1AT23ME020

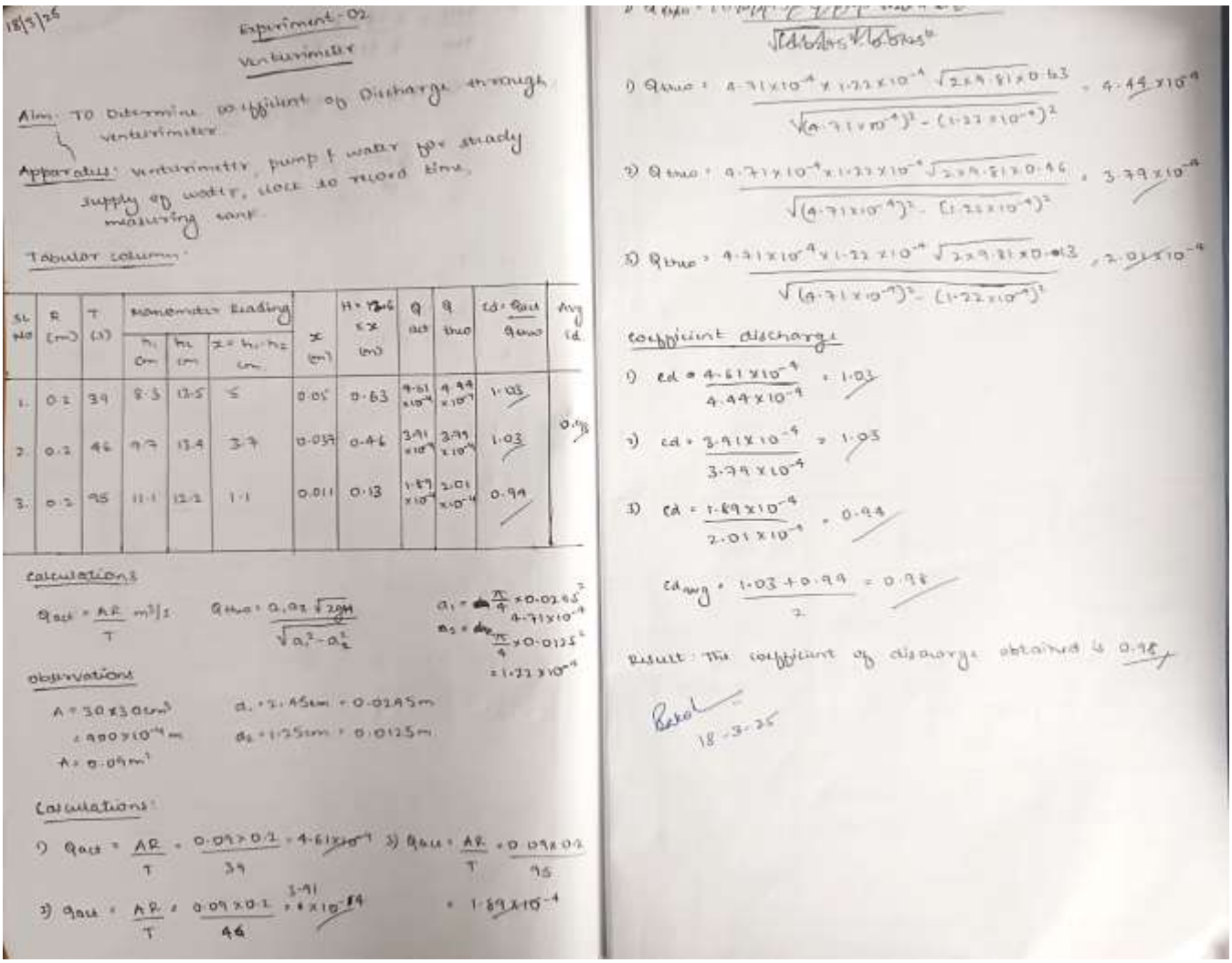
Lab: Fluid Mechanics Course Code: BME403 Sem: IV

CIE-I (Max. Marks: 15)

Sl. No.	Date	Exp. No.	Name of the Experiment/Model	1	2	3	4	Total Marks	Signature	
									Staff	Student
1	27/2/25	1	Venturimeter	5	3	2	5	15		Uachana
2	6/3/25	2	Orifice meter	5	2	2	5	14		Uachana
3	13/3/25	3	V - notch	5	2	2	5	14		Uachana
4	27/3/25	4	Bernoulli's equation	5	3	2	5	15		Uachana
5	10/4/25	5	Saybolt viscometer	5	2	2	5	14		Uachana
6	24/4/25	6	Friction in pipes	5	2	2	5	14		Uachana
7	8/4/25	7	Minor losses	5	3	2	5	15		Uachana
8										
9										
10										
11										
12										
13										
Average Marks								15		Uachana

1. Conduction Experiment (5 Marks)
2. Specimen Calculation / Execution (03 Marks)
3. Results and Plotting the Graph (02 Marks)
4. Record Writing (5 Marks)

The Observation book is also evaluated at the completion of each experiment.



Experiment-02

Venturimeter

Aim: To Determine coefficient of Discharge through venturimeter

Apparatus: venturimeter, pump, water for steady supply of water, clock to record time, measuring tank.

Tabular column:

Sl no	a (m)	T (s)	Manometer Reading h1 cm	h2 cm	x = h1-h2 cm	x (m)	H = 12.6 x x (m)	Q act	Q theo	Cd = Q act / Q theo	Avg Cd
1.	0.2	39	8.5	13.5	5	0.05	0.63	9.61×10^{-4}	9.44×10^{-4}	1.03	0.98
2.	0.2	46	9.7	13.4	3.7	0.037	0.46	3.91×10^{-4}	3.79×10^{-4}	1.03	
3.	0.2	95	11.1	12.2	1.1	0.011	0.13	1.89×10^{-4}	2.01×10^{-4}	0.94	

Calculations:

$Q_{act} = \frac{AR}{T}$ m³/s $Q_{theo} = \frac{a_1 a_2 \sqrt{2gH}}{\sqrt{a_1^2 - a_2^2}}$

$a_1 = \frac{\pi}{4} \times 0.02^2 = 4.71 \times 10^{-4}$

$a_2 = \frac{\pi}{4} \times 0.0125^2 = 1.22 \times 10^{-4}$

Observations:

A = 30 x 30 cm² = 900 x 10⁻⁴ m²

A = 0.09 m²

a_1 = 2.45cm = 0.0245m

a_2 = 1.25cm = 0.0125m

Calculations:

1) $Q_{act} = \frac{AR}{T} = \frac{0.09 \times 0.1}{39} = 4.61 \times 10^{-4}$

2) $Q_{act} = \frac{AR}{T} = \frac{0.09 \times 0.1}{46} = 3.91 \times 10^{-4}$

3) $Q_{act} = \frac{AR}{T} = \frac{0.09 \times 0.1}{95} = 1.89 \times 10^{-4}$

1) $Q_{theo} = \frac{4.71 \times 10^{-4} \times 1.22 \times 10^{-4} \sqrt{2 \times 9.81 \times 0.63}}{\sqrt{(4.71 \times 10^{-4})^2 - (1.22 \times 10^{-4})^2}} = 4.44 \times 10^{-4}$

2) $Q_{theo} = \frac{4.71 \times 10^{-4} \times 1.22 \times 10^{-4} \sqrt{2 \times 9.81 \times 0.46}}{\sqrt{(4.71 \times 10^{-4})^2 - (1.22 \times 10^{-4})^2}} = 3.79 \times 10^{-4}$

3) $Q_{theo} = \frac{4.71 \times 10^{-4} \times 1.22 \times 10^{-4} \sqrt{2 \times 9.81 \times 0.13}}{\sqrt{(4.71 \times 10^{-4})^2 - (1.22 \times 10^{-4})^2}} = 2.01 \times 10^{-4}$

Coefficient discharge

1) $Cd = \frac{4.61 \times 10^{-4}}{4.44 \times 10^{-4}} = 1.03$

2) $Cd = \frac{3.91 \times 10^{-4}}{3.79 \times 10^{-4}} = 1.03$

3) $Cd = \frac{1.89 \times 10^{-4}}{2.01 \times 10^{-4}} = 0.94$

$Cd_{avg} = \frac{1.03 + 0.99}{2} = 0.98$

Result: The coefficient of discharge obtained is 0.98

Read

18-3-25

Identification of Slow learners:

Slow learners are identified from the SEE result as well as from their performance in the CIE.

ATRIA INSTITUTE OF TECHNOLOGY
Department of Mechanical Engineering

Sl. No	Subject Code	Name of the Subject	Regular App	Regular Pass	Regular %	Repeaters App	Repeaters Pass	Repeaters %	Lateral Entry App	Lateral Entry Pass	Lateral Entry %	Total App	Total Pass	Total %	Name of the Faculty
1	21MATME4	Complex Analysis,Probability and Linear Programming	6	5	83%				5	5	100%	13	10	77%	Prof. Anu S
2	21ME42	Machining Science and Jigs & Fixtures	11	7	64%				5	5	100%	16	12	75%	Dr. Srikanth Bindar
3	21ME43	Fluid Mechanics	9	5	56%				5	4	80%	14	9	64%	Prof. Prashanthkumar S
4	21ME44	Mechanics of Materials	9	5	56%				5	4	80%	14	9	64%	Dr. Venkata Gowda
5	21BE45	Biology For Engineers	10	8	80%				5	5	100%	15	13	87%	Prof Prakruthi P B
6	21MEL46	Mechanical Measurements and Metrology Lab	11	11	100%				5	5	100%	16	16	100%	Dr Srikanth Bindar/Dr Manjunath C J
7	21KSK47	Samskrutika Kannada	8	8	100%				5	5	100%	13	13	100%	Prof Suresh Kumar J
8	21KBK47	Balake Kannada	3	3	100%							3	3	100%	Prof Jeslin G
9	21MT48J	Spread Sheets for Engineers	11	11	100%				5	5	100%	16	16	100%	Dr. Srikanth Bindar
10	21UH49	Universal Human Values	11	11	100%				5	5	100%	16	16	100%	Prof. Prashanthkumar S
11	21INT49	Internship Internship Internship	9	9	100%				5	5	100%	14	14	100%	Prof Chandrashekhar G L/ Prof Praveen Kumar B C
12	21MATDIP41	Additional Mathematics							5	5	100%	5	5	100%	Prof. Madhu

Toppers List

Sl. No	USN	NAME	%
1	1AT22ME016	ZOYA B I	87.5
2	1AT22ME001	ANKITHGOWDA C	86.0
3	1AT22ME003	MOHAMMED UWAIS	81.4
4	1AT22ME401	VANI .I	79.9
5	1AT22ME067	RAKSHITH C	76.8

	Regular	Repeaters	Lateral Entry
Total Appeared	11		5
No. of FCD	4		2
No. of First Class	1		2
No. of Second Class	-		-
No. of Passed	5		4
No. of Failures	6		1
% of Result	45.5%		80.0%

Overall	2022-23	2021-22	2020-21
Total Appeared:	16	51	41
No. of Passed:	9	10	41
% of Pass:	56.3%	19.6%	100.0%

Head of the Department
Department of Mechanical Engineering
Atria Institute of Technology
Anandnagar, Bangalore-560 024

Principal
Principal
Atria Institute of Technology
Anandanagar, Bengaluru-24

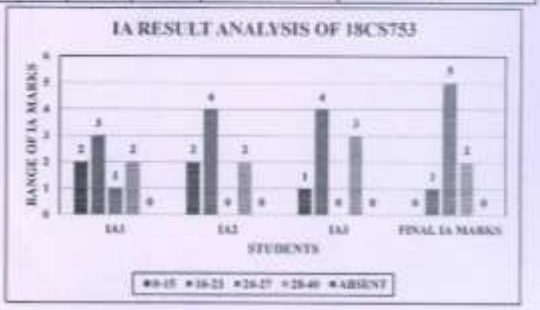
Result analysis of Semester end exam which provides the slow and fast learners

ATRIA INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING
RESULT SHEET OF 7TH SEMESTER FOR AY 2023-24

IA MARKS OF ALL 3 IA FOR INTRODUCTION TO ARTIFICIAL INTELIGENCE (18CS753)

SNO.	USN	NAME	MARKS (IA1) (40)	MARKS (IA2) (40)	MARKS (IA3) (40)	AVG (40)	AVG (30)	ASSIGNMENT (10)	FINAL MARKS (40) (Avg(30) + Assignment(10))
1	1AT20ME018	Hruday Ravi Sidhu	19	18	18	18	14	10	24
2	1AT20ME025	Mohan R	11	15	16	14	11	10	21
3	1AT20ME026	Monish Kumar G	39	39	40	39	30	10	40
4	1AT20ME029	P Abhishek Kumar	10	18	28	19	14	10	24
5	1AT20ME038	Syed Ibrahim	23	22	10	18	14	10	24
6	1AT20ME039	Syed Muzaffer Hussain	25	9	22	19	14	10	24
7	1AT20ME040	Syed Rasool Mohammad Hussain	18	18	20	19	14	10	24
8	1AT20ME045	Varun Raj P	39	39	40	40	30	10	40

RANGE	IA1 NO. OF STUDENTS	IA2 NO. OF STUDENTS	IA3 NO. OF STUDENTS	FINAL IA MARKS
0-15	2	2	1	0
16-23	3	4	4	1
24-27	1	0	0	5
28-40	2	2	3	2
ABSENT	0	0	0	0



CLASS CO-ORDINATOR

HOD

Head of Department
Mechanical Engineering
ATRIA INSTITUTE OF TECHNOLOGY
BENGALURU-560024

The graph shows improvement in the CIE performance of students.

Slow learners are identified from the Continuous internal assessment marks of every subjects.

ATRIA INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)
Anandanagar, Bengaluru – 560 024
Accredited by NAAC A++ & NBA
Department of Mechanical Engineering

Academic Year: 2022-23 | Subject Name: Fluid Power Engineering

Date:14.10.2022 | Subject Code: 18ME55

Slow Learners

Name of the Faculty : Mr. Prashanth Kumar S

Semester : 5th

SUBJECT AND SUBJECT CODE- TM (18ME54)		
SL No	NAME	USN
1.	1AT20ME001	A ARCHANA ROYAL
2.	1AT20ME016	GANESH GOWTHAM J
3.	1AT20ME019	LIKHITHA D
4.	1AT20ME026	MONISH KUMAR G
5.	1AT20ME045	VARUN RAJ P
6.	1AT21ME405	G N RAGHAVENDRA

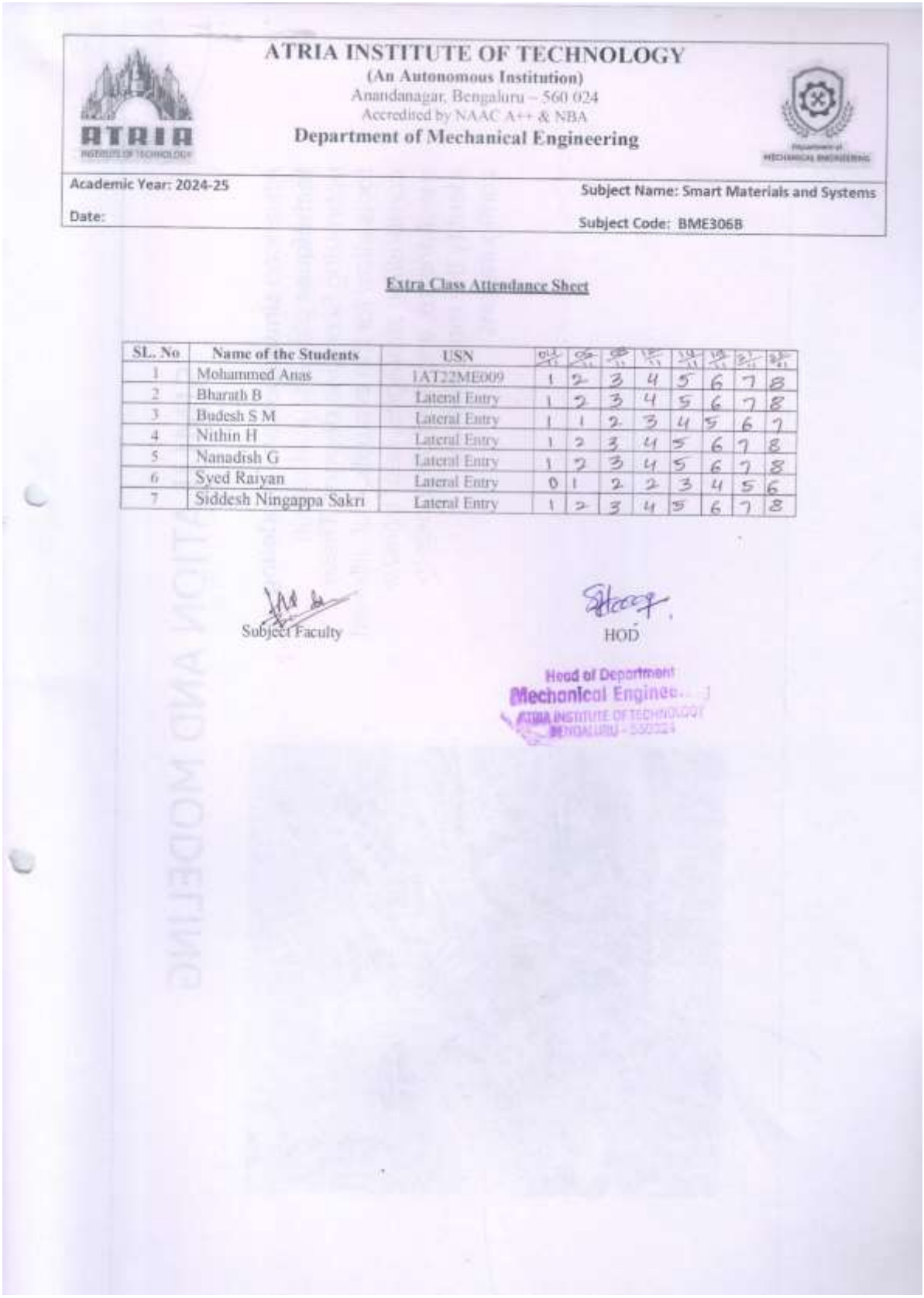
Action Taken:
1. Motivated to understand all derivation.
2. Helped them to solve previous years question papers.
3. Gave extra test (quiz) to make the average marks.
4. Extra classes conducted by concern faculties.
5. Informed them about NPTEL online courses.

Subject Faculty

HOD

Head of Department
Mechanical Engineering
ATRIA INSTITUTE OF TECHNOLOGY
BENGALURU - 560 024

Slow learners identified for the course



ATRIA INSTITUTE OF TECHNOLOGY
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Accredited by NAAC A++ & NBA
Department of Mechanical Engineering

Academic Year: 2024-25
Subject Name: Smart Materials and Systems

Date:
Subject Code: BME306B

Extra Class Attendance Sheet

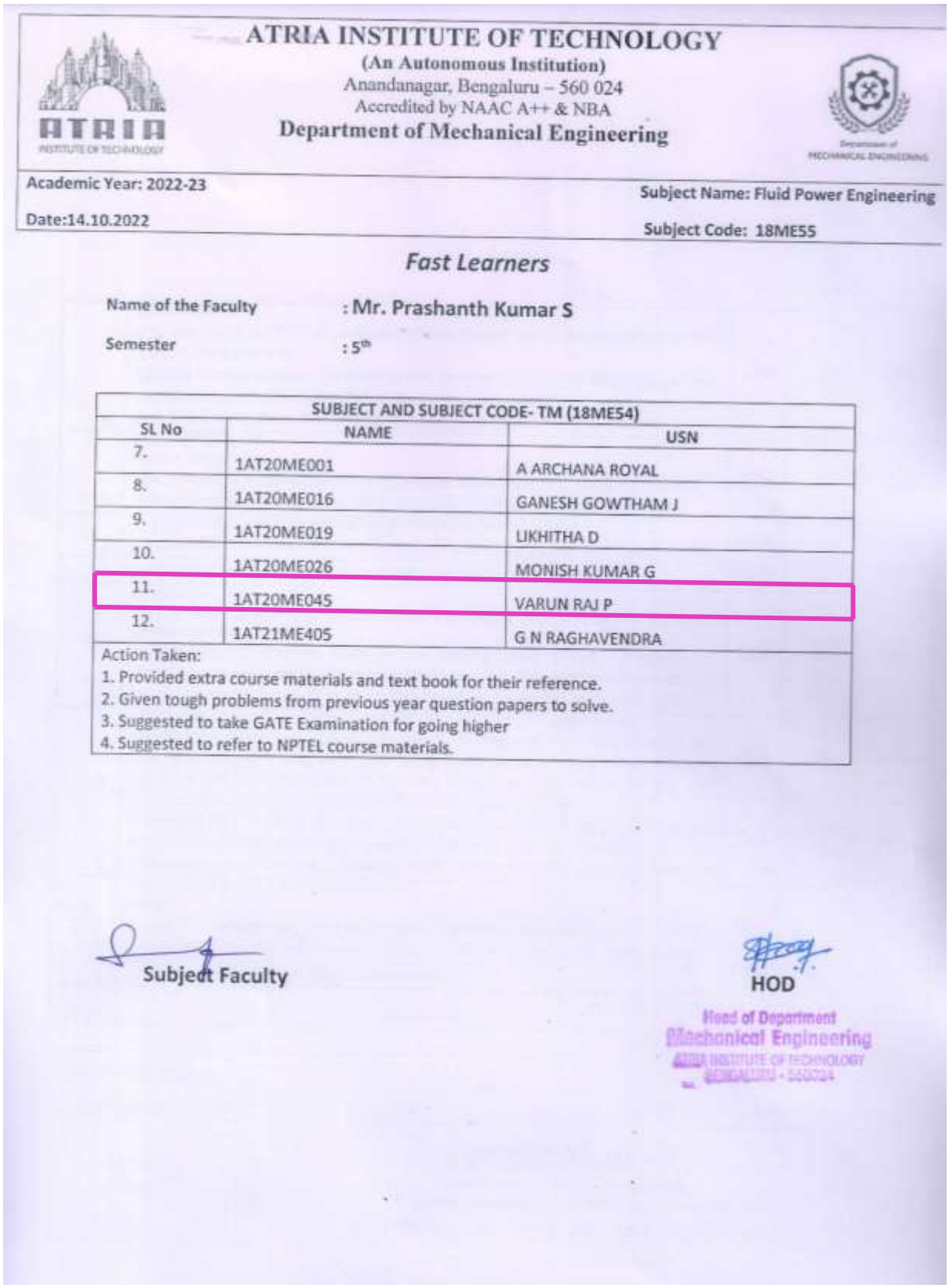
SL. No	Name of the Students	USN							
1	Mohammed Anas	1AT22ME009	1	2	3	4	5	6	7	8
2	Bharath B	Lateral Entry	1	2	3	4	5	6	7	8
3	Budesh S M	Lateral Entry	1	1	2	3	4	5	6	7
4	Nithin H	Lateral Entry	1	2	3	4	5	6	7	8
5	Nanadish G	Lateral Entry	1	2	3	4	5	6	7	8
6	Syed Raiyan	Lateral Entry	0	1	2	2	3	4	5	6
7	Siddesh Ningappa Sakri	Lateral Entry	1	2	3	4	5	6	7	8

Subject Faculty

HOD

Head of Department
Mechanical Enginee...
ATRIA INSTITUTE OF TECHNOLOGY
BENGALURU - 560024

Attendance of Remedial class conducted for slow learners



ATRIA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)
Anandanagar, Bengaluru – 560 024
Accredited by NAAC A++ & NBA
Department of Mechanical Engineering

Academic Year: 2022-23
Subject Name: Fluid Power Engineering
Date:14.10.2022
Subject Code: 18ME55

Fast Learners

Name of the Faculty : Mr. Prashanth Kumar S
Semester : 5th

SUBJECT AND SUBJECT CODE- TM (18ME54)		
Sl No	NAME	USN
7.	1AT20ME001	A ARCHANA ROYAL
8.	1AT20ME016	GANESH GOWTHAM J
9.	1AT20ME019	LIKHITHA D
10.	1AT20ME026	MONISH KUMAR G
11.	1AT20ME045	VARUN RAJ P
12.	1AT21ME405	G N RAGHAVENDRA

Action Taken:
1. Provided extra course materials and text book for their reference.
2. Given tough problems from previous year question papers to solve.
3. Suggested to take GATE Examination for going higher
4. Suggested to refer to NPTEL course materials.

Subject Faculty

HOD

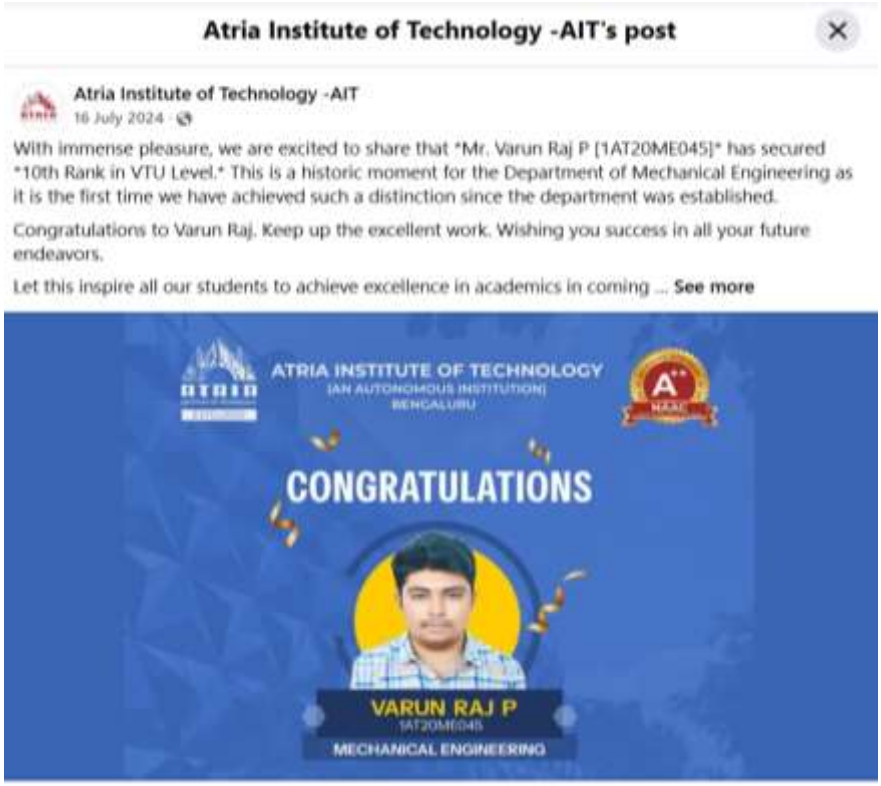
Head of Department
Mechanical Engineering
ATRIA INSTITUTE OF TECHNOLOGY

Fast learners recognized for the course

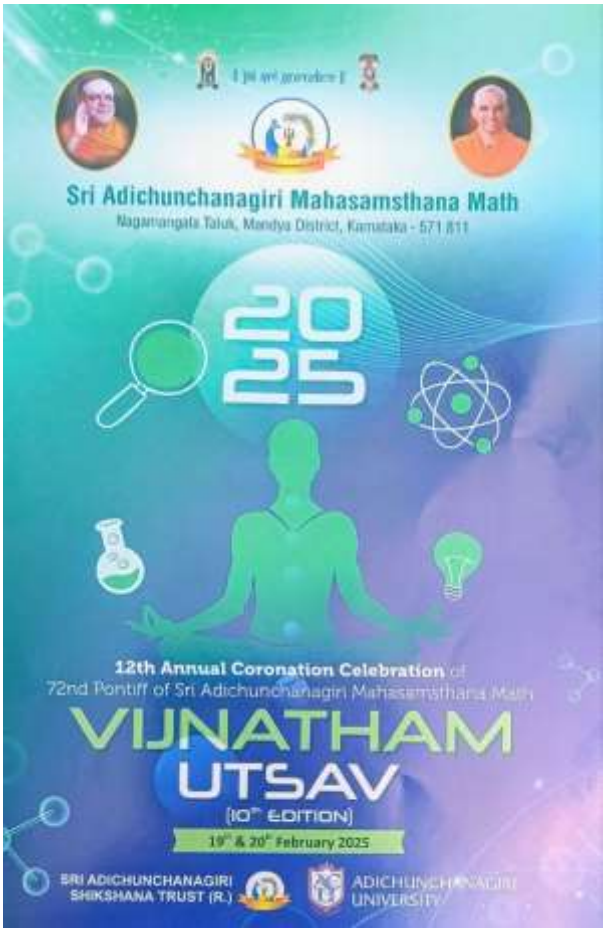
Varun Raj P – Student of Mechanical department was recognized as fast learner. He was continuously monitored and motivated by all faculties of the department which enhanced his result to secure 10th rank in VTU. Below is the list of Rank holders

Mechanical Engineering					
1	1JB21ME404	MOHANKUMAR L	S.J.B. INSTITUTE OF TECHNOLOGY, BANGALORE	9.16	1
2	2SA21ME400	ABDUL KAREEM	SECAB INSTITUTE OF ENGINEERING & TECHNOLOGY,	9.07	2
3	4SF20ME043	SOURABH	SAHYADRI COLLEGE OF ENGINEERING AND MANAGEMENT,	9.05	3
4	1RL20ME005	MULA PAVAN KUMAR REDDY	R.L. JALAPPA INSTITUTE OF TECHNOLOGY, DODDABALLAPUR	9.01	4
5	4SF20ME039	SATHVIK M BEKAL	SAHYADRI COLLEGE OF ENGINEERING AND MANAGEMENT,	9.01	5
6	2JR20ME007	MANISH VIJAYKUMAR KADEMANI	JAIN COLLEGE OF ENGINEERING AND RESEARCH, BELAGAVI	8.95	6
7	2KD20ME022	SHANTANU KULKARNI	K L E COLLEGE OF ENGINEERING AND TECHNOLOGY,CHIKODI	8.94	7
8	4CB20ME001	ANUSHA G SHETTY	CANARA ENGINEERING COLLEGE, BANTWAL	8.93	8
9	4SF20ME037	SAGAR G	SAHYADRI COLLEGE OF ENGINEERING AND MANAGEMENT,	8.92	9
10	1AT20ME045	VARUN RAJ P	ATRIA INSTITUTE OF TECHNOLOGY, ANAND NAGAR,	8.9	10

Rank list announced by the VTU



Fast learners are encouraged to participate in technical competitions.



Students participating in Project expo at Adichunchanagiri university 2024-25

Students engaged in GATE training session.

Gagan V Naidu from the Department of Mechanical Engineering, along with his teammate, achieved a remarkable feat by securing the **2nd Runner-up** position at the **Design and Innovation Clinic – 2023**, organized by the **Central Manufacturing Technology Institute (CMTI) from 11th to 13th April 2023**. Their innovative project impressed the judges, earning them a cash prize of ₹10,000 as well as recognition for their creativity and technical expertise.

Fast learners are encouraged to undertake NPTEL courses.

Table 6: List of NPTEL Courses completed by our Students

SL. No	Title of the NPTEL Course	Semester	Academic Year	No of Students
1	Basics of Finite Element Analysis - II	06	2024-25	01
2	Manufacturing Process Technology – I & II	06	2023-24	01
Total				**02**

Sample Certificates of NPTEL Courses completed:

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत-कुशल भारत

This certificate is awarded to

ABHISHEK BK

for successfully completing the course

Basics of Finite Element Analysis - II

with a consolidated score of **49** %

Online Assignments	19.17/25	Proctored Exam	30/75

Total number of candidates certified in this course: **46**

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jan-Mar 2025
(8 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL25ME08S436404499 To verify the certificate No. of credits recommended: 2 or 3

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

ZOYA B I

for successfully completing the course

Manufacturing Process Technology - I & II

with a consolidated score of **52** %

Online Assignments	18.1/25	Proctored Exam	34.2/75

Total number of candidates certified in this course: **666**

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jan-Apr 2024
(12 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

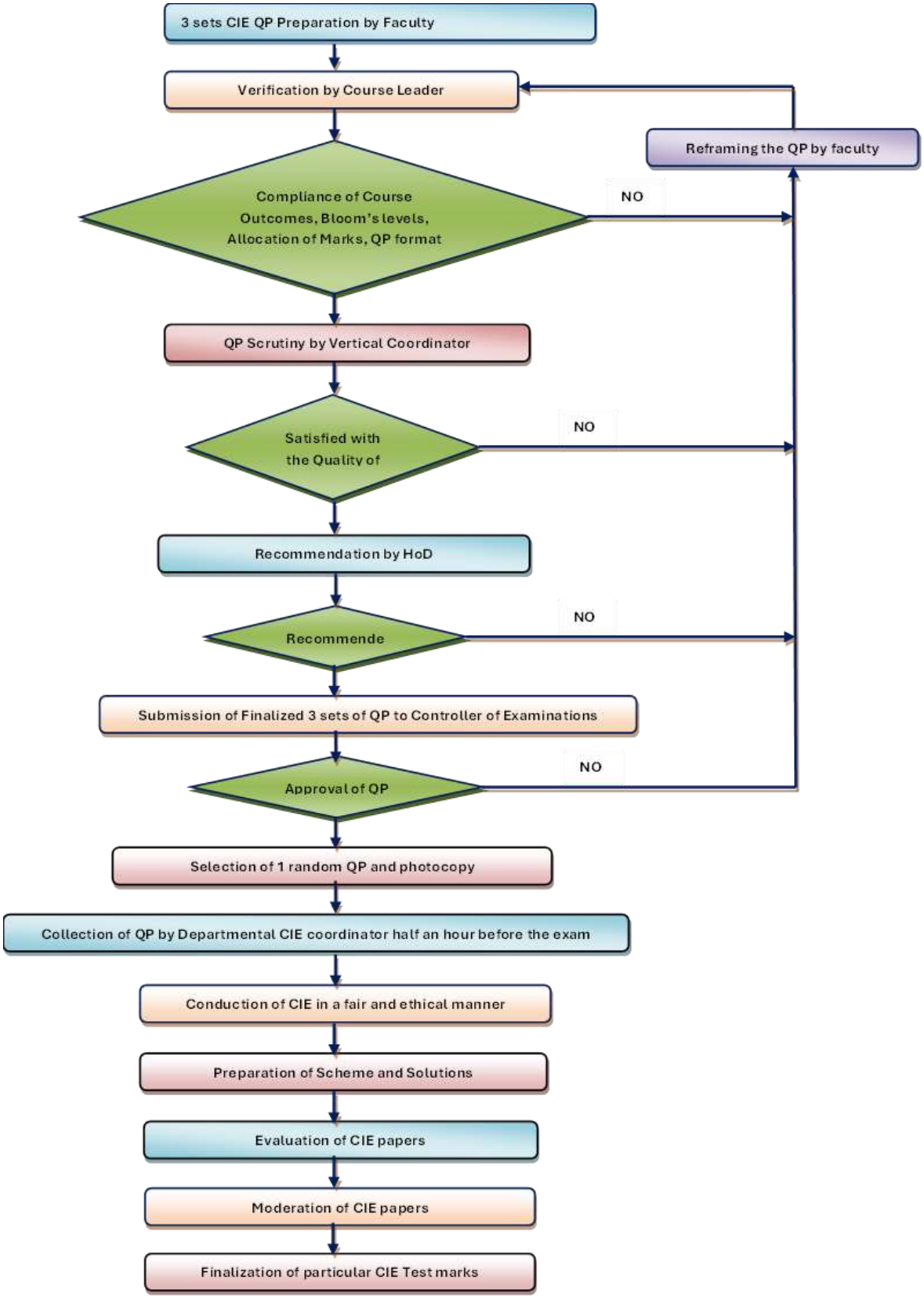
swayam

Roll No: NPTEL24ME48S952301153 To verify the certificate No. of credits recommended: 3 or 4

Peer to peer learning (include objectives)

Students of 6th and 4th semester who visited Germany as part of German track program gave a session on Germany industrial visit

2.2.2 Quality of Internal Semester Question papers, assignments, and Evaluation Process mentioned in the action plan, we can align the IA questions with correct course outcomes and arbitrary levels. Process shown in the flowchart.



Assignment is mapped to higher Cognitive levels

ATRIA INSTITUTE OF TECHNOLOGY
Department of Mechanical Engineering
Anandnagar, Bengaluru **560024**

Assignment -2

Academic Year: 2024-25 — **Subject Name: Machine Design**

Date:15.04.2025 — **Subject Code: BME602**

Sl No	Questions	CO	Marks	Cognitive Levels
1	Derive an expression for Beam strength of a helical gear	CO4	10	CL 2
2	Design a pair of helical gear to transmit a power of 20KW from a shaft running at 1500rpm to a parallel shaft to be run at 450rpm and helix angle is 23°. Suggest suitable surface hardness for the gear pair.	CO4	10	CL3
3	Determine the module for a pair of helical gear to transmit 15KW of power at 4000rpm of pinion with i=5:1. Pinion is made of 0.4% carbon steel untreated (σo =69.6Map) and gear is made of cast iron (σo =31MPa). Helix angle is 20°. Number of gear teeth on. Pinion is 24. (Gear system 20°FDI)	CO4	10	CL3
4	Design a pair of helical gears to transmit 15 KW at 1200 rpm of pinion. The gear is to rotate at 600 rpm. The helix angle is 17.5°. The center. distance between the gears is 150mm. The pinion is made of high carbon steel (σo =103.5 MPa) and gear 0.40% carbon steel, untreated (σo =69.6 MPa).	CO4	10	CL4
5	Design a pair of helical gear to transmit 12KW at 2400rpm of pinion. The velocity ratio required is 4:1, helix angle is 23°. the centre distance is to be around 300mm. Pressure angle in the normal plane is 14.5° involute. Pinion material is cast steel ASTM class B (σ_{o1} =51.7Mpa), Gear material is cast iron better grade (σ_{o2} =31Mpa).	CO4	10	CL4
6	Derive an equation for formative number of teeth on bevel gear.	CO4	10	CL2
7	Design a pair of bevel gears to transmit a power of 25 KW from a shaft rotating at 1200 rpm to a perpendicular shaft to be rotated at 400 rpm.	CO4	20	CL3
8	A pair of straight bevel gears are to transmit 15kW at 1500 rpm input speed. The number of teeth on pinion is 20 and the speed ratio is 5. Design the gears assuming 14 ½ full depth form.	CO4	20	CL3
9	Design a pair of bevel gear to transmit 12KW at 300rpm of the gear and 1470rpm of the pinion the angle between the shaft axes is 90°. The pinion has 20 teeth and the material for gears is cast steel (σ_o = 183.33N/mm2), BHN 320. Take service factor as 1.25 and check the gear for wear and dynamic load. Suggest suitable hardness for the gear pair.	CO4	10	CL4

10	A pair of mitre gears has pitch diameter 280 mm and face width of 36 mm and runs at 250 rpm. The teeth are 14 ½° involute profile and accurately cut and transmit 6 kW. Neglect friction angle, find the following: (i) Outside diameter of gears. (ii) Resultant tooth load tangent to pitch cone. (iii) Radial load on the pinion. (iv) Thrust on the pinion.	CO4	10	CL3
11	State the assumptions of Petroff's equation. Derive Petroff's equation for lightly loaded bearing.	CO5	10	CL2
12	Explain the formation of continuous oil film in journal bearing?	CO5	10	CL1
13	Design the main bearing of a steam turbine that runs at 1800 rpm. The load on the bearing is estimated to be 2500 N. Assume SAE 20 grade oil.	CO5	10	CL3
14	A lightly loaded journal bearing has a load of 1 KN. The oil used is SAE60 and mean effective temperature of operation is 40°C. The journal has a diameter of 50 mm and the bearing has a diameter of 50.5mm. The speed of journal is 15000 rpm. The L/d ratio is limited to 1.2. Determine Coefficient of Friction and power loss in friction.	CO5	10	CL3
15	A full journal bearing of 50mm diameter, 75 mm long supports a radial load of 1000 N. The speed of the shaft is 600 rpm. The surface temperature of bearing is limited to 60°C and the room temperature is 30°C. Determine the viscosity of the oil, if the bearing is well ventilated and no artificial cooling is to be used. The ratio of journal diameter to diametral clearance is 1000.	CO5	10	CL4
16	A 75 mm long full journal bearing of diameter 75mm supports a load of 10 KN. The speed of the journal is 1200 rpm. The absolute viscosity of the oil is $10X10^{-3}$ Pas and the diametral clearance ratio is 0.001. Determine the coefficient of friction by using i. Petroff's equation (ii) McKee's equation (iii) Raimondi and Boyd curve.	CO5	10	CL3
17	A 50mm long full journal bearing of diameter 100mm supports a load of 10 KN. The speed of the journal is 1200 rpm. The absolute viscosity of the oil is 10X10-3 Pas and the diametral clearance ratio is 0.001. Determine the coefficient of friction by using i. Petroff's equation (ii) McKee's equation (iii) Raimondi and Boyd curve.	CO5	10	CL4

At the end of the course, the student will be able to:

CO1. Apply codes and standards in the design of machine elements and select an element based on the Manufacturer's catalogue.

CO2. Analyse the performance and failure modes of mechanical components subjected to combined loading and fatigue loading using the concepts of theories of failure.

CO3. Demonstrate the application of engineering design tools to the design of machine components like shafts, keys, couplings, welded and riveted joints, brakes and clutches

CO4. Design different types of gears and simple gear boxes for relevant applications.

CO5. Apply design concepts of hydrodynamic bearings for different applications using the manufacturers, catalogue.

Course Coordinator

Vertical Coordinator

Dr. Venkate Gowda C
Professor & Head
Dept. of Mechanical Engineering

Head of Department
Mechanical Engineering
ATRIA INSTITUTE OF TECHNOLOGY
BANGALORE - 560024

Atria Institute of Technology
Bengaluru - 560024

Dept. of Mechanical Engineering

Rubric: **Assignment Evaluation**

Marks allotted: **10 Marks**

Assignment Rubrics

Category	10-7 Marks	4-9 Marks	-5 Marks	0 Marks
Completion	All of the assigned work is completed	Most of the assigned work is complete	Some of the assigned work is complete	Students did not turn in assignment
Timeliness	Submitted on the said date	Submitted a day late	Late Submission	No Submission
Accuracy	All the answers are correct	Most of the answers are correct	Some of the answers are correct	None of the answers are correct
Work Shown	All the work is meticulously shown	Most work is meticulously shown	Some steps are missing	Student did not show any work

HOD

Head of Department
Mechanical Engineering
ATRIA INSTITUTE OF TECHNOLOGY
BENGALURU - 560024

Rubrics of Assignment

ATRIA INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)
(Approved by AICTE, New Delhi, Affiliated to VTU, Recognized by Govt. of Karnataka)
Anandanagar, Bengaluru – 560 024
Department of Mechanical Engineering

Subject: Total Quality Management **AY 2025-26**
Faculty: Prof. Jerin Raju John **Subject Code: BME613A**

Assignment - III

SL. NO.	USN	TEAM MEMBERS	TOPIC
1	1AT22ME007	I HABEEB AHMED KHAN	**Ford Motor Company**'s Transformation: 'Quality is Job 1'
	1AT22ME010	MOHAMMED RAIYAN	
	1AT22ME015	SYED NAVEED PASHA	
2	1AT22ME002	ABHISHEK B K	**Xerox** and the Power of Benchmarking: Reviving a Brand through TQM
	1AT22ME006	HARSHITHA G L	
	1AT22ME008	LAHARIKA PRASHANTH	
3	1AT22ME001	ABHINANDAN G	**Tata Steel**'s TQM Excellence: Achieving the Deming Prize
	1AT22ME012	PAWANSUT YADAV	
	1AT22ME016	ZAID BEARY M	
4	1AT22ME011	N NAVYA	TQM in **Infosys**: Enhancing Software Quality through Process Maturity
	1AT23ME400	MANOJ M	
	1AT23ME404	SRIVATHSA K S	
5	1AT23ME402	NIDARSHAN S M	**Motorola**'s Journey to Six Sigma: A Landmark in Quality Improvement
	1AT23ME403	ROHAN GOWDA M	
	1AT23ME405	VINAY H P	
6	1AT22ME013	PRAGATHI G	Implementation of Kaizen and Lean Principles in **Toyota**: A TQM Success Story
	1AT22ME014	PRANATHI G	
	1AT23ME401	NAGARAJ BASAPPA HALLUR	

INSTRUCTIONS:

1. Each batch should **prepare a PPT** with respect to the given topic. PPT should contain Title Slide with the name of all the team members, Introduction to Total Quality Management (TQM), Company Overview, Need for TQM Implementation, TQM Implementation Strategy, Key Actions Taken, Results and Achievements, Challenges Faced, Lessons Learned & Best Practices, Conclusion.
2. All the student should submit a hand written **one-page report** in an A4 sheet paper related to the topic.
3. The deadline for submission is **23rd May, 2025.**

Students giving Presentation on Case studies

Atria Institute of Technology
Bengaluru - 560024

Dept. of Mechanical Engineering

Rubric: **Case Study**

Marks allotted: **10 Marks**

Criteria	Weightage	Excellent (Full Marks) (9-10 Marks)	Good (Partial Marks) (5-8 marks)	Needs Improvement (Minimal Marks) (Below 5 Marks)
Problem Identification	2 marks	Clearly defines the problem and explains relevance.	Defines the problem but lacks detail or context.	Fails to define the problem or gives irrelevant details.
Analysis and Approach	3 marks	Uses appropriate concepts, tools, and detailed analysis.	Analysis lacks depth or misses key aspects.	Analysis is superficial or incorrect.
Solution Design	3 marks	Provides a practical, complete, and innovative solution.	Solution is feasible but lacks completeness.	Solution is infeasible or poorly explained.
Presentation	1 mark	Clear and structured with visuals or code snippets.	Presentation is somewhat clear but disorganized.	Unclear and poorly structured presentation.
Relevance and Impact	1 mark	Strong real-world relevance with articulated impact.	Limited relevance or unclear impact.	Irrelevant or no connection to real-world issues.

HOD
Head of Department
Mechanical Engineering
ATRIA INSTITUTE OF TECHNOLOGY
BENGALURU - 560024

Rubrics of Case study

USN | | | | | | | | | | |

ATRIA INSTITUTE OF TECHNOLOGY
(AN AUTONOMOUS INSTITUTION)
BENGALURU

INTERNAL ASSESSMENT - III
2024-25 EVEN Semester

Course Title: Heat Transfer		Course Code: BME601
Date: 29/05/2025	Time: 11:15am – 12:45pm	Sem: 06
Max. Marks: 40		Duration : 90 min

Note: Answer any TWO full questions, choosing one full question from Part-A and Part B

PART A

Q. No.		Questions	Marks	Bloom's Level	CO No.
1	a	Explain the significance of Reynolds number, Prandtl number, Nusselt number and Grasshof number	10	L2	CO4
	b	Air at 20°C and at atmospheric pressure flows at a velocity of 4.5m/s over a flat plate. The plate surface is at 60°C. Assuming that the transition rate occurs at a critical Reynolds number of $5x10^5$, calculate the following: (i) Thickness of hydrodynamics boundary layer (ii) Thickness of thermal boundary layer (iii) Local & average heat transfer coefficient (iv) Heat transfer rate from both sides for unit width of the Plate (v) Skin friction coefficient.	10	L3	CO4
		OR			
2	a	Explain briefly with sketches: (i) Boundary layer thickness (ii) Thermal boundary layer thickness	10	L2	CO4
	b	Air at 40 °C flows with velocity 5 m/s over a 2m long flat plate which is at 120 °C. Determine the average heat transfer coefficient over 2m length. Also find the rate of heat transfer per 1m width of the plate.	10	L3	CO4

PART B

Q. No.		Questions	Marks	Bloom's Level	CO No.
3	a	Differentiate between the mechanism of filmwise and dropwise condensation. Explain why dropwise condensation is preferred over filmwise condensation.	10	L2	CO5
	b	A steam condenser consists of a square array of 400 tubes each 6mm in diameter. The tubes are exposed to saturated steam at a pressure of 0.15bar. The tube surface is maintained at a temperature of 25°C. Calculate the condensation rate per unit length of the tube.	10	L3	CO5
		OR			
4	a	Derive the equations for LMTD for a parallel flow heat exchangers	10	L2	CO5
	b	A 4 kg/s product stream from a distillation column is to be cooled by a 3 kg/s water stream in a counter flow heat exchanger. The hot and cold stream inlet temperatures are 400 K and 300 K respectively and the area of the exchangers is 30 m^2. If the overall heat transfer coefficient is estimated to be 820 W/m^2K, determine the product stream outlet temperature if its specific heat is 2500 J/kg K and the coolant outlet temperature	10	L3	CO5

Sample copy of Internal Assessment question paper

No.	CL1	CL2	CL3	CL4	CL5	CL6
Level	Remember	Understand	Apply	Analyze	Evaluate	Create

Course Outcomes

CO No.	CO Description	Bloom's Level
CO 1	Understand the modes of heat transfer and apply the basic laws to formulate engineering systems.	L3
CO 2	Understand and apply the basic laws of heat transfer to extended surface, composite material and unsteady state heat transfer problems.	L3
CO 3	Analyze heat conduction through numerical methods and apply the fundamental principle to solve radiation heat transfer problems.	L3
CO 4	Analyze heat transfer due to free and forced convective heat transfer.	L3
CO 5	Understand the design and performance analysis of heat exchangers and their practical applications, Condensation and Boiling phenomena.	L3

Sample copy of Internal Assessment question paper

ATRIA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)
Bengaluru

INTERNAL ASSESSMENT – II
2024-25 EVEN Sem
Question Paper Scrutiny Format

Course Name : Heat Transfer

Course Code : BME601

QP Setter Names	:	Mr. Ramesh T G.	Mr. Prashanth Kumar S	Set 3
Whether the QP in the given Format	:	Yes / No	Yes / No	Yes / No
Date & Time of IA Schedule is correct	:	Yes / No	Yes / No	Yes / No
Scheme & Solution attached	:	Yes / No	Yes / No	Yes / No
In conformity with the prescribed syllabi and schemes of examinations	:	Yes / No	Yes / No	Yes / No
Questions follows the required standard	:	Yes / No	Yes / No	Yes / No
Free of typographical and grammatical errors	:	Yes / No	Yes / No	Yes / No
In conformity with marks allotted are in accordance with the direction issued in the scheme and as per the model question paper supplied.	:	Yes / No	Yes / No	Yes / No
Prepared with the right answer key and correct mark distribution	:	Yes / No	Yes / No	Yes / No
In conformity with the prescribed CO's & RBT Levels	:	Yes / No	Yes / No	Yes / No
Additional Comments if any	:	NIL		
Recommendations	:	Set 2.		
Moderator Name	:	Mr. Prashanth Kumar S		
Dept. Designation	:	Assistant professor		
Contact details	:	Phone No. : 9892602431		
		Email : prashanth kumar.s@atria.edu		
Signature with date	:	23/5/25		

23/5/25
Vertical Program Coordinator

Head of Department
Mechanical Engineering
ATRIA INSTITUTE OF TECHNOLOGY
BENGALURU-560024

HoD 25/5/25

Question paper scrutiny format

ATRIA INSTITUTE OF TECHNOLOGY
(AN AUTONOMOUS INSTITUTION)
BENGALURU

Continuous Internal Evaluation (CIE) - 11 2024-25 Even Semester		
Question Paper Scrutiny		
Course Title: Heat Transfer		Course Code: BME601
Date: 23-05-2025	Time: 23-05-2025	Sem: 06

QP Setter details			
QP Setter 1 Name	Mr. Rakesh T G	Signature with date	23/5/25
QP Setter 2 Name	Mr. Prashanth kumar S	Signature with date	23/5/25
QP Setter 3 Name		Signature with date	
Vertical Program Coordinator Name	Mr. Prashanth kumar S	Signature with date	23/5/25
HOD	Dr. Venkatesh Gowda C.	Signature with date	23/5/25

Head of Department
Mechanical Engineering
ATRIA INSTITUTE OF TECHNOLOGY
BENGALURU - 560024

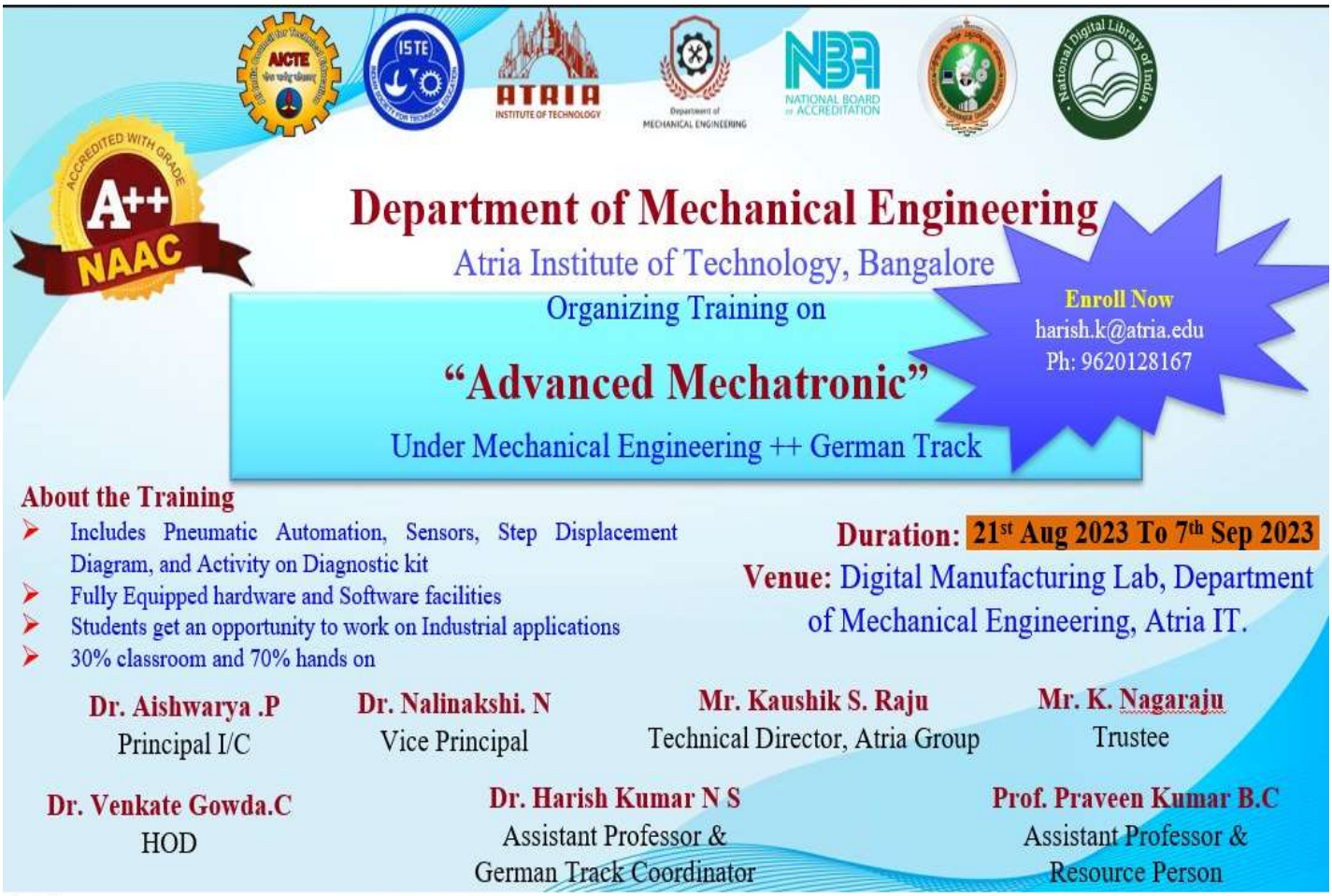
Question paper scrutiny format

2.2.4 Initiatives related to industry interaction

Students of the department are trained at Digital Manufacturing lab, which is a part of Industry collaboration with SIEMNES. These are the programs organized.

Table 7: List of programs conducted

SL. No	Title of the Program conducted	Academic Year	No of Students
1	One Day Workshop on "Intellectual Property Rights in Innovation and Research: A Comprehensive Overview"	2024-25	40
2	Advanced Mechatronic	2023-24	08
3	Research Methodology & Advance Mechatronics	2023-24	21
4	Workshop on Entrepreneurial Innovative Skill set for Industry 4.0	2022-23	40



SIEMENS ATTENDANCE SHEET SITRAIN

Course Name: Advanced Mechatronics

Language: English

Trainer: 1. Praveen Kumar B.C.
Date: 21-08-2023 to 23/08/2023
Time: 9:00Am to 5:00Pm
Classroom: Digital Manufacturing Lab, Atria IT, Bangalore
Location: Atria Institute of Technology, Bangalore, Karnataka

Sl No.	USN	Participant Name	21-08-2023		22-08-2023		23-08-2023	
			M	A	M	A	M	A
1	1AT20ME001	A Archana Royal						
2	1AT20ME004	Aditya Reddi P						
3	1AT20ME005	Ahmed Raza						
4	1AT20ME007	Arjun G						
5	1AT20ME008	Ashik S						
6	1AT20ME010	B Karthik						
7	1AT20ME015	Diyashree Chatterjee						
8	1AT20ME016	Ganesh Gowtham J						

Training session conducted for Mechanical department students in Digital Manufacturing lab collaborated with SIEMENS.

Industry expert evaluated the projects done by students at project exhibition.

JBoS

ATRIA INSTITUTE OF TECHNOLOGY
(AN AUTONOMOUS INSTITUTION)
BENGALURU

Anandnagar, Hebbal, Bengaluru,
Karnataka 560024
080 2363 1298
principal@atria.edu
www.atria.edu

Ref: AIT/ PRIN/Int/2024-25/126 **Date:** 27.02.2025

OFFICE ORDER

Subject: Re-Formulation of Joint Board of Studies with effect from Academic Year 2024-2025

As per the Atria Institute of Technology academic statute which is composed in accordance with UGC and VTU Guidelines to implement autonomous status, the Joint Board of Studies (**JBoS**) has been formulated with effect from **Academic Year 2024-2025 for a period of three years.** The nominated members for the JBoS have been listed below.

Sl.no	Name	Designation	Role	Contact Number	Email
1	Dr Rajesha S	Principal	Chairperson	9845748949	principal@atria.edu
2	Dr. Ravichandra K R	Dean- Academics	Convener	98805 23462	deanacademics@atria.edu
3	Dr. Nalinakshi N	Vice Principal	Member	88615 62682	viceprincipal@atria.edu
4	Dr. Vasanthi Satyananda	Dean -IQAC	Member	9886027716	vasanthi@atria.edu
5	Dr. Sampada H K	Dean (SW)	Member	99169 58940	studentwelfare@atria.edu
6	Dr. Devi Kannan	Prof & HOD, CSE	Member	9460279588	csehod@atria.edu
7	Dr. Deepak N R	Prof. &HOD- ISE	Member	9449632581	isehod@atria.edu
8	Dr. Jagadeesh H S	Prof. & HOD-ECE	Member	9480101286	ecehod@atria.edu
9	Dr. Venkategowda C	Prof & HOD, ME	Member	9964360346	mechhod@atria.edu
10	Dr. Surendra H J	Prof & HOD,Civil	Member	9945015853	civilhod@atria.edu
11	Dr. Neena Prasad	HOD- MBA	Member	9980160405	mbahod@atria.edu
12	Dr. Mamatha T	HOD- MCA	Member	7760847216	mcahod@atria.edu
13	Dr. Punith Kumar	Prof, HOD, BSH	Member	8861562682	bsehod@atria.edu
14	Mr.Narasimha Shastri	Head- Training and Placements	Member	81974 31001	tpo@atria.edu

Some of the key functions of the JBoS are listed for reference.

- Provide a scheme for curriculum development for various courses, keeping in view the college's vision, the interests of the stakeholders, predictions of future technology changes, and national requirements for consideration and approval by the Academic Council
- Analyse and suggest the action plans for stakeholders' feedback on curriculum development and assessment process
- Suggest methodologies for innovative teaching and evaluation techniques; Coordinate research, teaching, extension, and other academic activities in the department/college.
- Recommend the draft syllabus proposed by BoS of various programs to the Academic Council
- All previously issued orders stands Null and Void. Kindly consider this order as the valid reference going forward.

The JBoS shall meet at least once a year.

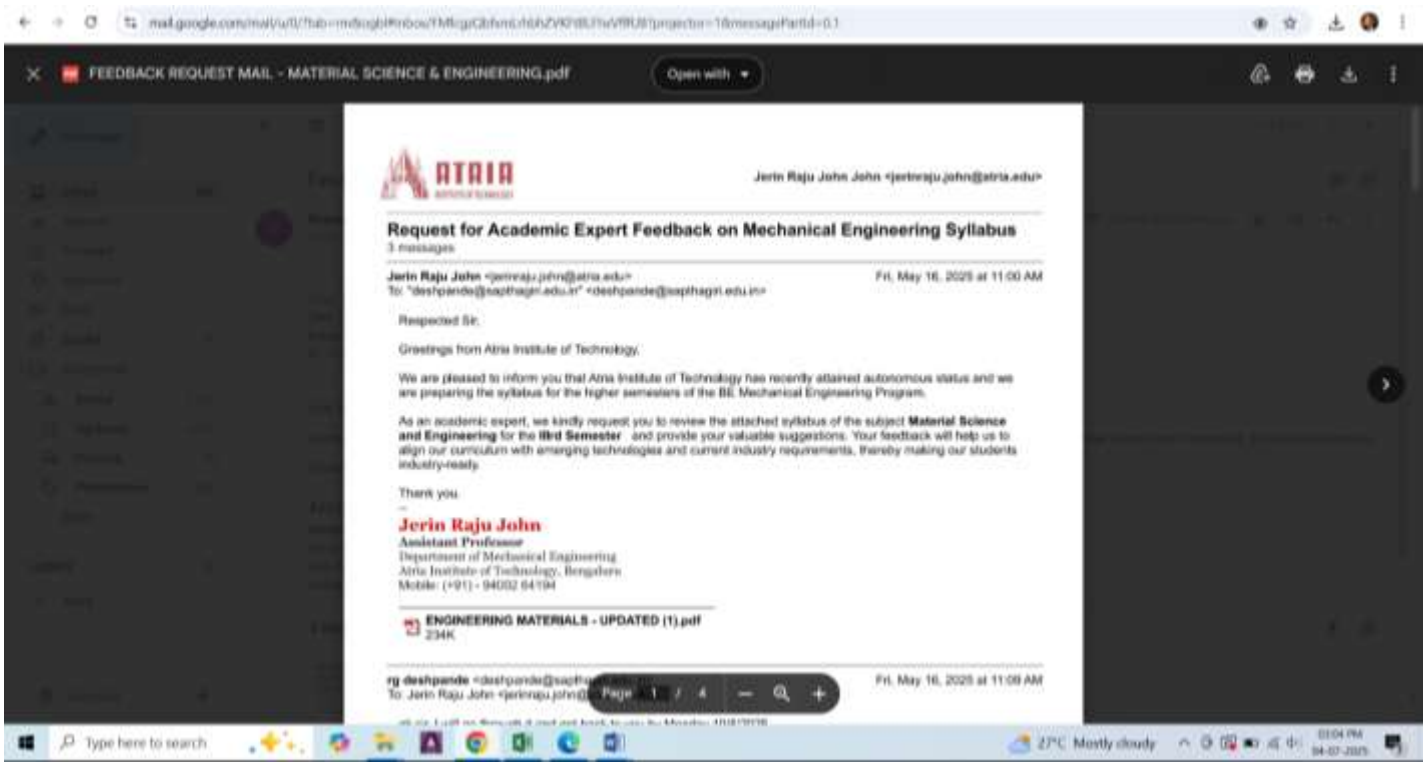
27/2/25

Principal
Principal
Atria Institute of Technology
Anandnagar, Bengaluru -24

CC To: All the Members of Committee.

AS KUPPARAJU & BROTHERS CHARITABLE FOUNDATION TRUST

Constitution of BOS for the department of Mechanical Engineering


FEEDBACK REQUEST MAIL - MATERIAL SCIENCE & ENGINEERING.pdf

Jerin Raju John John <jerinraju.john@atria.edu>

Request for Academic Expert Feedback on Mechanical Engineering Syllabus

3 messages

Jerin Raju John <jerinraju.john@atria.edu> Fri, May 16, 2025 at 11:00 AM
To: "deshpande@sapthagiri.edu.in" <deshpande@sapthagiri.edu.in>

Respected Sir,

Greetings from Atria Institute of Technology.

We are pleased to inform you that Atria Institute of Technology has recently attained autonomous status and we are preparing the syllabus for the higher semesters of the BE Mechanical Engineering Program.

As an academic expert, we kindly request you to review the attached syllabus of the subject **Material Science and Engineering** for the **IIIrd Semester** and provide your valuable suggestions. Your feedback will help us to align our curriculum with emerging technologies and current industry requirements, thereby making our students industry-ready.

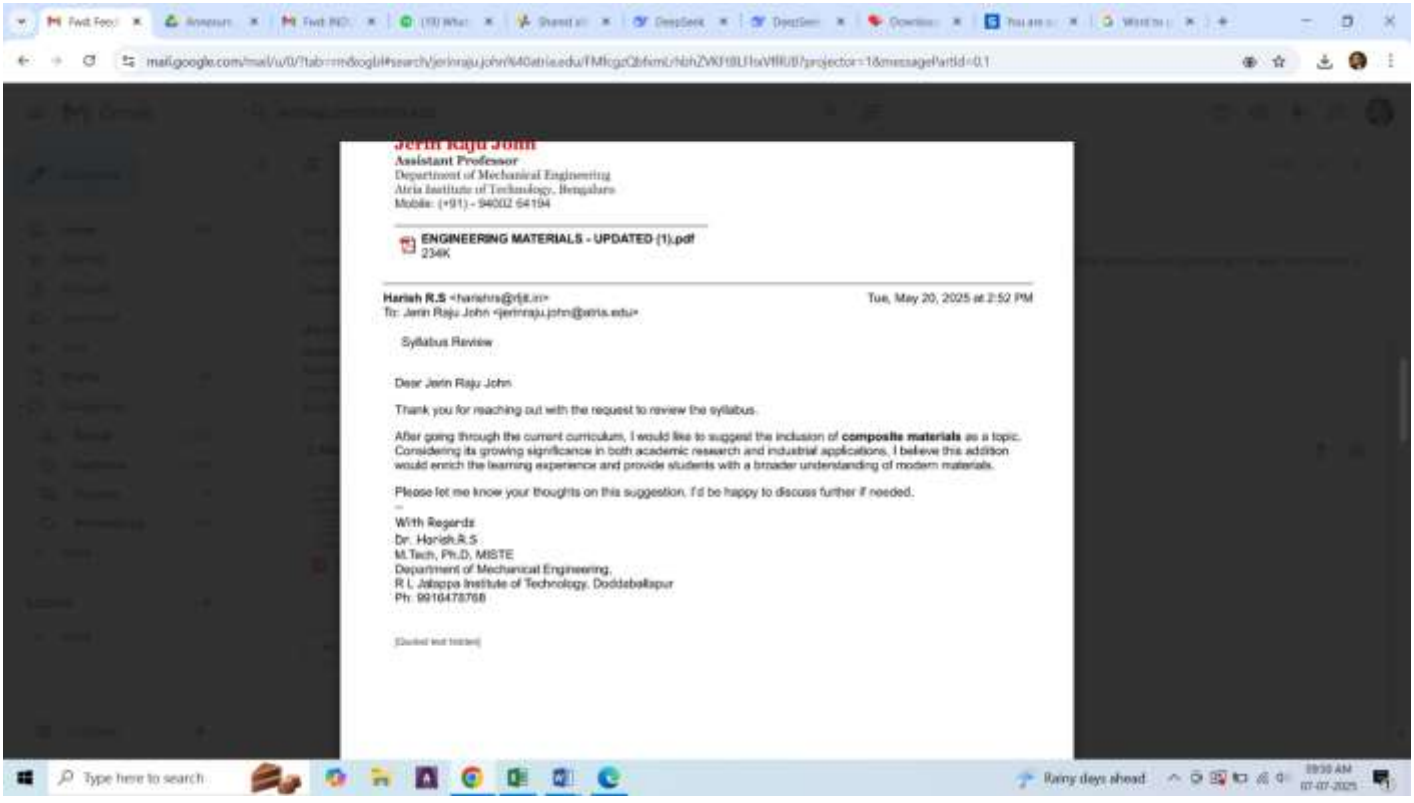
Thank you

Jerin Raju John
Assistant Professor
Department of Mechanical Engineering
Atria Institute of Technology, Bengaluru
Mobile: (+91) - 94002 64194

ENGINEERING MATERIALS - UPDATED (1).pdf
234K

rg deshpande <deshpande@sapth...> Fri, May 16, 2025 at 11:09 AM
To: Jerin Raju John <jerinraju.john@...>

Page 1 / 4


mail.google.com/mail/u/0/?ab=mdoogl#search/jerinraju.john%40atria.edu/FMfcgzQbfvmLrbhZVKFtBLFlxVfRUBl?projector=1&messagePartId=0.1

Jerin Raju John
Assistant Professor
Department of Mechanical Engineering
Atria Institute of Technology, Bengaluru
Mobile: (+91) - 94002 64194

ENGINEERING MATERIALS - UPDATED (1).pdf
234K

Harish R.S <harishrs@rljit.in> Tue, May 20, 2025 at 2:52 PM
To: Jerin Raju John <jerinraju.john@atria.edu>

Syllabus Review

Dear Jerin Raju John

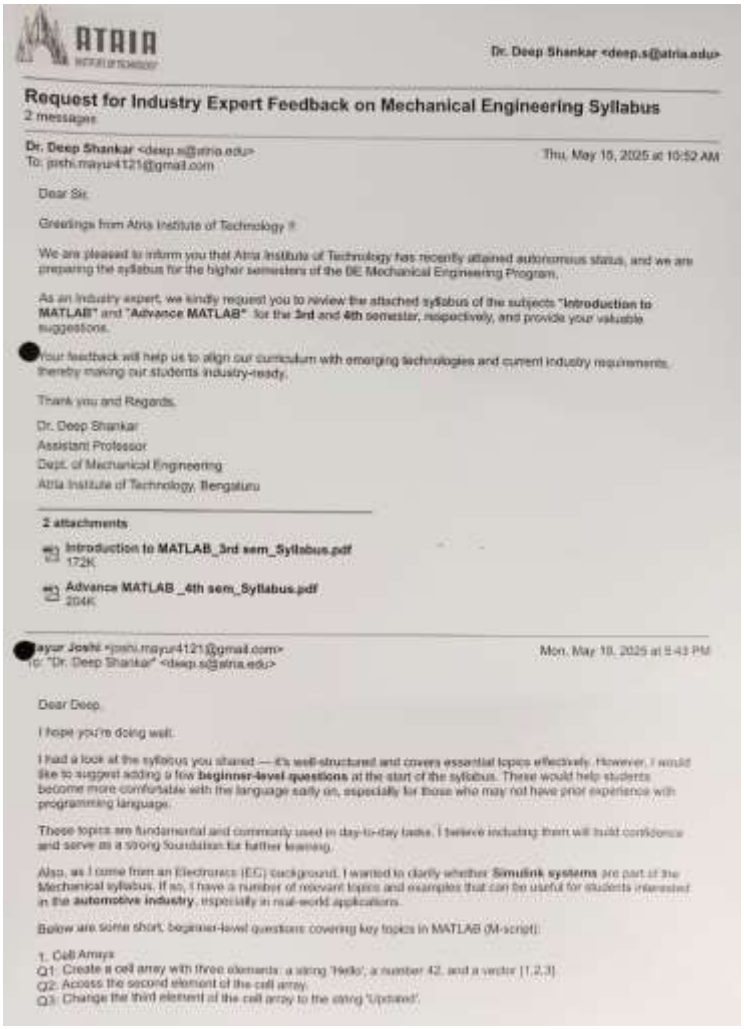
Thank you for reaching out with the request to review the syllabus.

After going through the current curriculum, I would like to suggest the inclusion of **composite materials** as a topic. Considering its growing significance in both academic research and industrial applications, I believe this addition would enrich the learning experience and provide students with a broader understanding of modern materials.

Please let me know your thoughts on this suggestion. I'd be happy to discuss further if needed.

With Regards
Dr. Harish.R.S
M.Tech, Ph.D, MISTE
Department of Mechanical Engineering,
R L Jalappa Institute of Technology, Doddaballapur
Ph: 9916478768

Syllabus Feedback requested and received from Academic expert



ATRIA

Dr. Deep Shankar <deep.s@atria.edu>

Request for Industry Expert Feedback on Mechanical Engineering Syllabus
2 messages

Dr. Deep Shankar <deep.s@atria.edu>
To: joshi.mayur4121@gmail.com
Thu, May 15, 2025 at 10:52 AM

Dear Sir,

Greetings from Atria Institute of Technology !!

We are pleased to inform you that Atria Institute of Technology has recently attained autonomous status, and we are preparing the syllabus for the higher semesters of the BE Mechanical Engineering Program.

As an industry expert, we kindly request you to review the attached syllabus of the subjects **"Introduction to MATLAB"** and **"Advance MATLAB"** for the **3rd** and **4th semester**, respectively, and provide your valuable suggestions.

Your feedback will help us to align our curriculum with emerging technologies and current industry requirements, thereby making our students industry-ready.

Thank you and Regards,

Dr. Deep Shankar
Assistant Professor
Dept. of Mechanical Engineering
Atria Institute of Technology, Bengaluru

2 attachments

Introduction to MATLAB_3rd sem_Syllabus.pdf
172K

Advance MATLAB _4th sem_Syllabus.pdf
204K

Mayur Joshi <joshi.mayur4121@gmail.com>
To: "Dr. Deep Shankar" <deep.s@atria.edu>
Mon, May 19, 2025 at 5:43 PM

Dear Deep,

I hope you're doing well.

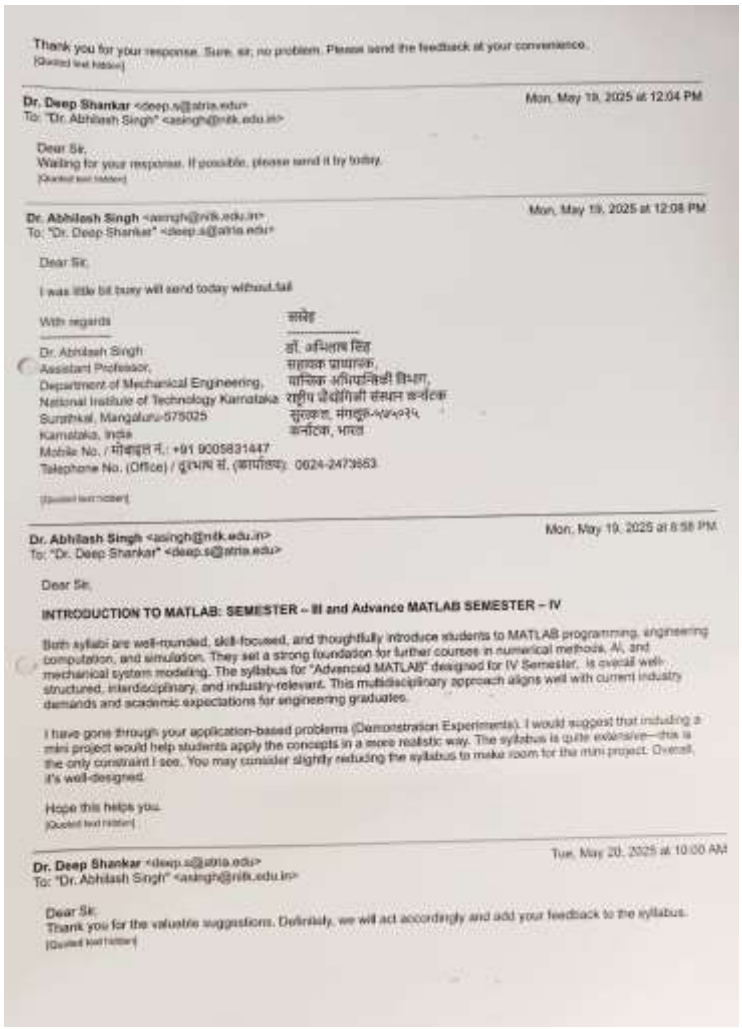
I had a look at the syllabus you shared — it's well-structured and covers essential topics effectively. However, I would like to suggest adding a few **beginner-level questions** at the start of the syllabus. These would help students become more comfortable with the language early on, especially for those who may not have prior experience with programming language.

These topics are fundamental and commonly used in day-to-day tasks. I believe including them will build confidence and serve as a strong foundation for further learning.

Also, as I come from an Electronics (EC) background, I wanted to clarify whether **Simulink systems** are part of the Mechanical syllabus. If so, I have a number of relevant topics and examples that can be useful for students interested in the **automotive industry**, especially in real-world applications.

Below are some short, beginner-level questions covering key topics in MATLAB (M-script):

1. Cell Arrays
Q1: Create a cell array with three elements: a string 'Hello', a number 42, and a vector [1,2,3].
Q2: Access the second element of the cell array.
Q3: Change the third element of the cell array to the string 'Updated'.



Thank you for your response. Sure, sir, no problem. Please send the feedback at your convenience.
[Quoted text hidden]

Dr. Deep Shankar <deep.s@atria.edu>
To: "Dr. Abhilash Singh" <asingh@nitk.edu.in>
Mon, May 19, 2025 at 12:04 PM

Dear Sir,
Waiting for your response. If possible, please send it by today.
[Quoted text hidden]

Dr. Abhilash Singh <asingh@nitk.edu.in>
To: "Dr. Deep Shankar" <deep.s@atria.edu>
Mon, May 19, 2025 at 12:08 PM

Dear Sir,

I was little bit busy will send today without fail

With regards

Dr. Abhilash Singh
Assistant Professor,
Department of Mechanical Engineering,
National Institute of Technology Karnataka
Surathkal, Mangaluru-575025
Karnataka, India
Mobile No. / मोबाइल नं.: +91 9005831447
Telephone No. (Office) / दूरभाष सं. (कार्यालय): 0824-2473863

सप्रेम

डॉ. अभिलाष सिंह
सहायक प्राध्यापक,
यांत्रिक अभियान्त्रिकी विभाग,
राष्ट्रीय प्रौद्योगिकी संस्थान कर्नाटक
सूरत्कल, मंगलुरु-५७५०२५,
कर्नाटक, भारत

[Quoted text hidden]

Dr. Abhilash Singh <asingh@nitk.edu.in>
To: "Dr. Deep Shankar" <deep.s@atria.edu>
Mon, May 19, 2025 at 8:58 PM

Dear Sir,

INTRODUCTION TO MATLAB: SEMESTER – III and Advance MATLAB SEMESTER – IV

Both syllabi are well-rounded, skill-focused, and thoughtfully introduce students to MATLAB programming, engineering computation, and simulation. They set a strong foundation for further courses in numerical methods, AI, and mechanical system modeling. The syllabus for "Advanced MATLAB" designed for IV Semester, is overall well-structured, interdisciplinary, and industry-relevant. This multidisciplinary approach aligns well with current industry demands and academic expectations for engineering graduates.

I have gone through your application-based problems (Demonstration Experiments). I would suggest that including a mini project would help students apply the concepts in a more realistic way. The syllabus is quite extensive—this is the only constraint I see. You may consider slightly reducing the syllabus to make room for the mini project. Overall, it's well-designed.

Hope this helps you.
[Quoted text hidden]

Dr. Deep Shankar <deep.s@atria.edu>
To: "Dr. Abhilash Singh" <asingh@nitk.edu.in>
Tue, May 20, 2025 at 10:00 AM

Dear Sir,
Thank you for the valuable suggestions. Definitely, we will act accordingly and add your feedback to the syllabus.
[Quoted text hidden]

Syllabus Feedback requested and received from Industry expert

List of MoUs

Table 8: List of MOUs active in the department year wise

S.NO.	Industry / Institute	Active/Inactive
AY (2023-24)		
1	Medini Technologies	Active
2	Hypotech Hydraulics Pvt Ltd	Active
3	COPES Tech India Pvt Ltd	Active
4	Silicon Micro Systems (SIMS India)	Active
5	Edu phoenix Private Limited	Active
6	Ace Designers	Active
7	German Academy of Digital Education	Active
AY (2022-23)		
1	SAE INDIA	Active
2	CMTI (Central Manufacturing Technology Institute)	Active
AY (2021-22)		
1	Square Edge Technologies	Active
2	Vocuni Private Limited	Active
3	Priston Smart Engineers	Active
4	LGS Trust	Active
5	CADMAXX Solutions	Active

2.2.5. Initiatives related to industry internship/summer training

Impact analysis of industrial Internship

Table 9: List of Student Research Internship/ Industry Internship (Course Code: 21INT82) 2024-25

Sl.No	USN	Name	Company Name	Duration in Months	Amount in Rs/Month	Area/Stream	Outcome Placement/ Certification
1	1AT21ME016	Zoya B I	Autoliv India Pvt Ltd	3	25,000	Manufacture	Placement
2	1AT22ME404	Yogesh K	Hydro Links Flexibles Pvt Ltd	3	24000	Manufacture	Placement
3	1AT21ME007	Rakshith C	AMTECH Tools	3	18,000	Production	Certification
4	1AT21ME010	Shakeel Iqbal	Hypotech Hydraulics pvt ltd	3	12,000	Manufacture	Placement
5	1AT21ME014	Vishnu Prasad KN	Hypotech Hydraulics pvt ltd	3	12,000	Manufacture	Placement
6	1AT21ME015	Vishwanath S Thadi	Hypotech Hydraulics pvt ltd	3	12,000	Manufacture	Placement
7	1AT22ME400	Abhishek M	Hypotech Hydraulics pvt ltd	3	12,000	Manufacture	Placement
8	1AT22ME401	Methelish S	Hypotech Hydraulics pvt ltd	3	12,000	Manufacture	Placement
9	1AT21ME001	Ankith gowda	L & T Construction equipment ltd	3	Nill	Manufacture	Certification
10	1AT21ME003	Mohammed Uwaies	Edu Phoenix Solution	3	Nill	Manufacture	Certification
11	1AT21ME005	Arshad P M	HAL	3	Nill	Manufacture/Design	Certification
12	1AT21ME006	Prerana R	Dynamatic manufacturing ltd	3	Nill	Manufacture/Design	Certification
13	1AT21ME008	Raul Alwin Dias	HAL	3	Nill	Manufacture/Design	Certification
14	1AT21ME009	Rohith S	GenEd Technologies	3	Nill	Manufacture/Production	Certification
15	1AT22ME402	Yashas N M	DRDO	3	Nill	Manufacture/Design	Certification
16	1AT22ME403	Vani J	Edu Phoenix Solution	3	Nill	Manufacture	Certification

Table 10: List of Student Research Internship/ Industry Internship 2023-24

SL. No	Name	USN	Name of the Company	Outcome Placement/ Certification
1	Harshith Achari	1AT17ME350	Trinity NDT Engineers	Certification
2	Abhinav Mugunthan	1AT19ME002	Phenix Solutions	Certification
3	Ashwani Kumar	1AT19ME009	Phenix Solutions	Certification
4	A Archana Royal	1AT20ME001	Atria University	Certification
5	Abdul Mateen Khan	1AT20ME003	Edu Phoenix Solution	Certification
6	Aditya Reddi P	1AT20ME004	Atria University	Certification
7	Ahmed Raza	1AT20ME005	Atria University	Certification
8	Akanksh S	1AT20ME006	Hypotech hydraulics pvt ltd	Certification
9	Arjun G	1AT20ME007	Atria University	Certification
10	Ashik S	1AT20ME008	Atria University	Certification
11	Azeem Khan	1AT20ME009	Phenix Solutions	Certification
12	B Karthik	1AT20ME010	Atria University	Certification
13	Bharath B	1AT20ME011	Hypotech hydraulics pvt ltd	Certification
14	Darshan A	1AT20ME013	Hypotech hydraulics pvt ltd	Certification
15	Dhanu Shekar V	1AT20ME014	ITC Ltd	Certification
16	Diyashree Chatterjee	1AT20ME015	Siemens	Certification
17	Ganesh Gowtham J	1AT20ME016	Atria University	Certification
18	Gopu Dinesh	1AT20ME017	Hypotech hydraulics pvt ltd	Certification
19	Hruday Ravi Sidhu	1AT20ME018	Phoenix solutions	Certification
20	Likhitha D	1AT20ME019	ACE designers company	Certification
21	M Deepa	1AT20ME020	OM SHAKTHI INDUSTRIES	Certification
22	Mohammed Faseeh I	1AT20ME022	phoenix soluttions	Certification
23	Mohammed Imaad	1AT20ME023	phoenix soluttions	Certification
24	Mohammed Mubarak Baig	1AT20ME024	Indian Institue of Science	Certification
25	Mohan R	1AT20ME025	phoenix soluttions	Certification
26	Monish Kumar G	1AT20ME026	CMTI	Certification
27	Mukul Raj Kumar	1AT20ME027	ITC Ltd	Certification
28	P Abhishek Kumar	1AT20ME029	phoenix soluttions	Certification
29	Rajula Naveen Reddy	1AT20ME030	Phoenix solutions	Certification
30	Rajula Uday Kiran Reddy	1AT20ME031	Phoenix solutions	Certification
31	Saipavan B G	1AT20ME032	ITC Ltd	Certification
32	Sandeep R	1AT20ME034	ITC Ltd	Certification
33	Shaik Waseem Pasha	1AT20ME035	phoenix soluttions	Certification
34	Sujeeth Kumar	1AT20ME036	phoenix soluttions	Certification
35	Syed Ibrahim	1AT20ME038	phoenix soluttions	Certification
36	Syed Muzaffer Hussain	1AT20ME039	phoenix soluttions	Certification
37	Rasool Mohammed Hussain	1AT20ME040	Eduphoenix solutions	Certification
38	Tejeswar Sivakoti	1AT20ME042	Atria University	Certification
39	Timothy G	1AT20ME043	Trinity NDT Engineers	Certification
40	Varun N	1AT20ME044	Atria University	Certification
41	Varun Raj P	1AT20ME045	Toyota kirloskar Motors Pvt Ltd	Certification
42	Chetan Reddy Y	1AT20ME046	Atria University	Certification
43	Ambrish G Y	1AT21ME400	phoenix soluttions	Certification
44	Arjun K	1AT21ME401	ASK Automotive Pvt Ltd	Certification

45	Ashwin S Nair	1AT21ME402	ACE designers company	Certification
46	Darshan Hr	1AT21ME403	phoenix soluttions	Certification
47	Meghana S	1AT21ME404	Copes Tech India Pvt Ltd	Certification
48	G N Raghavendra	1AT21ME405	PHOENIX SOLUTIONS	Certification
49	S Kavya	1AT21ME406	PHOENIX SOLUTIONS	Certification
50	Sandhya J V	1AT21ME407	Copes Tech India Pvt Ltd	Certification
51	Shashi Kumar M S	1AT21ME408	Toyota kirloskar Motors Pvt Ltd	Certification
52	Venu S	1AT21ME409	PHOENIE SOLUTIONS	Certification

Autoliv

13-Feb-2025

The Principal
Atria Institute of Technology
Bangalore

Dear Sir/Madam,

Sub: Granting Permission for Student's in Project work and signing of confidentiality / Non- disclosure agreement

We are pleased to inform you that permission is hereby granted to your student **Ms. Zoya B I** who is currently pursuing **BE - Mechanical Engineering**, to carry out the 'Project Work' in our organization for the period of **12 Months** which starts from **17-Feb-2025**.

The training will be guided by **Mr. Girish Badiger - Production** subject to institute and student(s) agreeing to sign the following confidentiality / Non-disclosure Agreement.

1. Student(s) and Institute deputed the student(s) understand that during the period of time that he/she/they deputed for project work/ Summer internship at Autoliv that he/she/they may have access to confidential information concerning Autoliv, its client(s), and its affiliates. This confidential information may include, but is not limited to, information about Autoliv's clients, accounts, transactions, communications between Autoliv and its clients and/or third parties any business, venture, project or operations that Autoliv has proposed or undertaken any technology, methodology, or process that Autoliv has developed, purchased, licensed or leased.

2. Student(s) and Institute deputed them also understand and agree that during his/her/their project period / Summer internship period with Autoliv and all times thereafter, he/she/they shall in no way disclose, use, or disseminate any confidential information that they have received concerning Autoliv, its clients or its affiliates to any person, corporation, association or other entity for any other purpose other than when it is necessary in the regular and proper scope of project work/study at Autoliv.

3. Student(s) also acknowledge that during his/her/their project/ training with Autoliv that he/she/they may have access to the confidential and proprietary technical/business information of Autoliv, its clients and its affiliates. Such information is the exclusive property of Autoliv and constitutes valuable assets to Autoliv. Student(s) understand and agree that during his/her/their project/training with Autoliv and at all times thereafter, he/she/they shall in no way disclose, use, or disseminate any such confidential proprietary technical/business information to any person, corporation, association or other entity for any purpose other than when it is necessary in the regular and proper scope of their project/training with Autoliv.

4. Additionally, student(s) understand and agree that any invention, discovery, improvement, product, or original work of authorship developed in the course of their internship/project with Autoliv is the sole and exclusive property of Autoliv. Student(s) I agree to execute any necessary assignments to this effect. Student(s) also agree to adhere to all applicable copyright laws in regard to the use of software. Student(s) agree not to copy a software program for another user if the copyright law forbids it, and will not use any software that is the property of Autoliv for their/his/her own purposes of a third party without the express written consent of Autoliv.

5. Student(s) acknowledge and agree that the identity of Autoliv's clients is confidential information and constitute trade secrets to the extent that such information constitute trade secrets, student(s) Agree not to utilize such confidential information to compete with Autoliv for assignments with Autoliv's clients, whether or not Autoliv is actively engaged with such client at the time of such information utilization.

6. Student(s) agree that during the period of time that he/she/they have engaged for project work/ summer internship at Autoliv and for one (1) year thereafter that student(s) will not solicit any Autoliv employees for a competing business or otherwise induce or encourage Autoliv employees to leave their employment.

Page 1 to 2

Autoliv

7. Student(s) shall return all documents and property belonging to Autoliv including, but not necessarily limited to, drawings, blueprints, reports, manuals, correspondence, customer lists, computer programs, policies and rules related to it's employees and all other materials and all copies thereof relating in any way to Autoliv's business, or in any way obtained by student(s) during the course of students stay in the Company. Student(s) further agree that he/she/they shall not retain any copies, notes or abstracts of the foregoing.

8. Student(s) acknowledge and agree that he/she/their covenants, duties, and obligations contained in this Agreement are independent, cumulative, and in addition to any and all other covenants, duties and obligations that student(s) have with Autoliv. This agreement will remain in effect even after student(s) summer internship/project/training with Autoliv has ended. With student(s) signature below, I/we acknowledge receipt of a copy of this Confidentiality/Non-Disclosure Agreement and understand my/our obligation to maintain the integrity of Autoliv's confidential information. I/we acknowledge that I/we was/were given a reasonable opportunity to review and negotiate the terms and conditions contained in this agreement.

9. The study/project Report shall not be handed over to any persons, firm or institutes whatsoever. Copy of the Report to be submitted to our Company's guide and obtain his approval prior to the submission of the same to the institute.

10. The student will be paid **INR 25000/- (Twenty Five Thousand only)** as stipend towards the reimbursement of any cost incurred/ incidental to his/ her/ their project work. No other payments whatsoever in nature will be reimbursed to the students. Company is also not liable for any type of insurance/ Compensation in case of accident/ injury etc. during the period of stay with the Company/ incidental to project works etc. any insurance coverage either statutory/ non-statutory shall be the obligation of college /institute deputing them for project work or students them self. Company will not accept/ entertain any claim of such nature. The institute / College deputing the student(s) shall at all times indemnify and keep indemnified the Company, Autoliv against all claims for compensation under the provision for any statutes time being in force by or may come in to force time to time or in respect of any students carrying out the project are against all cause and expenses or penalty incurred by the employer in connection therewith.

12. Students shall adhere to the security rules and disciplinary code of the Company.

Kindly acknowledge the copy of this agreement as a token of your acceptance of the same
(You're Signature with Office seal).

Thanking You,

Yours truly,

For Autoliv India Pvt. Ltd.

Signature of Principal with Office Seal

Principal
Atria Institute of Technology
Anandnagar, Bengaluru-24

Narasimha Murthy T
Vice President – Human Resources

Signature of Student (Zoya B I)

Page 1 to 2

Student is offered job after completion of her Internship at the same organization

Table 11: List of Industrial visits carried out in the Department of Mechanical Engineering

Sl.No	Academic Year	Industry Name	Date	Semester	Student attended
1	**2024-25**	Deccan Hydraulics , KGF	17/05/2025	4th and 6th	58
2		Vishnu Forge pvt. ltd, Bangalore	17/04/2025	4th	32
3		Germany Industrial visit and Training program	01/03/2025 to 15/03/2025	4th, 6th and 2024 passed out students	07
4		Alliage Metal casting pvt. Ltd	6/12/2024	3rd and 7th	47
5		KIOCL Industry visit, Mangalore	8/11/2024	4th	19
1.	**2023-24**	Emmvee Solar system pvt. Ltd.	21/02/2024	3rd and 5th	31
2.		ACE Designers	27/07/2024	6th	19
3.		Deccan Hydraulics pvt. Ltd	20/04/2024	8th	22
4.		Rittal Pvt ltd. Doddaballapura	15/11/2023	7th	38
1.	**2022-23**	Mother Diary, Bangalore	19/07/2023	6th	43
2.		ACE Designers	25/05/2023	6	43
3.		Vishnu Forge Industrial Ltd, Bangalore	13/03/2023	3rd and 8th	32
4.		Trinity NDT Bangalore	05/01/2023	3rd and 5th	31
5.		KMF Mega Diary, Nandi cross C B Pura	15/06/2022	4th	34
6.		BEML, KGF	21/05/2022	6th and 8th	45

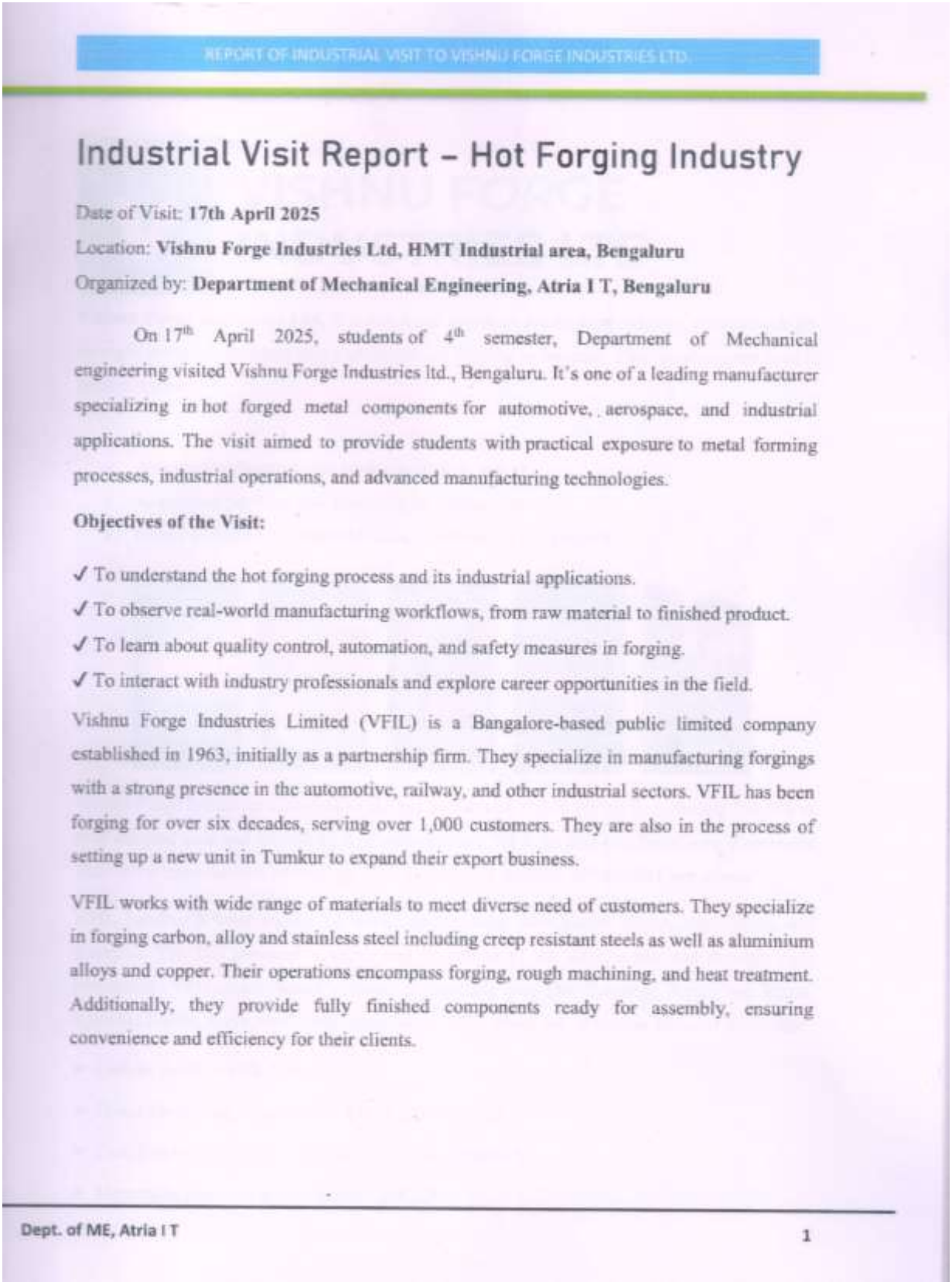
Industry visit to Ace designers for 4th semester students - AY 2023-24

Industry visit to Deccan hydraulics for 4th and 6th semester students AY 2024-25

Impact analysis of industrial visit

The department of Mechanical engineering have organised many industrial vist across various streams mechanical. These students had visited their facility as Industrial trip on 27/07/2024. ACE Designers visited our institution and recruited students of Mechanical engineering.

Objectives of the Industrial visit is framed in order to obtain the required outcome



REPORT OF INDUSTRIAL VISIT TO VISHNU FORGE INDUSTRIES LTD.

Industrial Visit Report – Hot Forging Industry

Date of Visit: **17th April 2025**

Location: **Vishnu Forge Industries Ltd, HMT Industrial area, Bengaluru**

Organized by: **Department of Mechanical Engineering, Atria I T, Bengaluru**

On 17th April 2025, students of 4th semester, Department of Mechanical engineering visited Vishnu Forge Industries ltd., Bengaluru. It's one of a leading manufacturer specializing in hot forged metal components for automotive, aerospace, and industrial applications. The visit aimed to provide students with practical exposure to metal forming processes, industrial operations, and advanced manufacturing technologies.

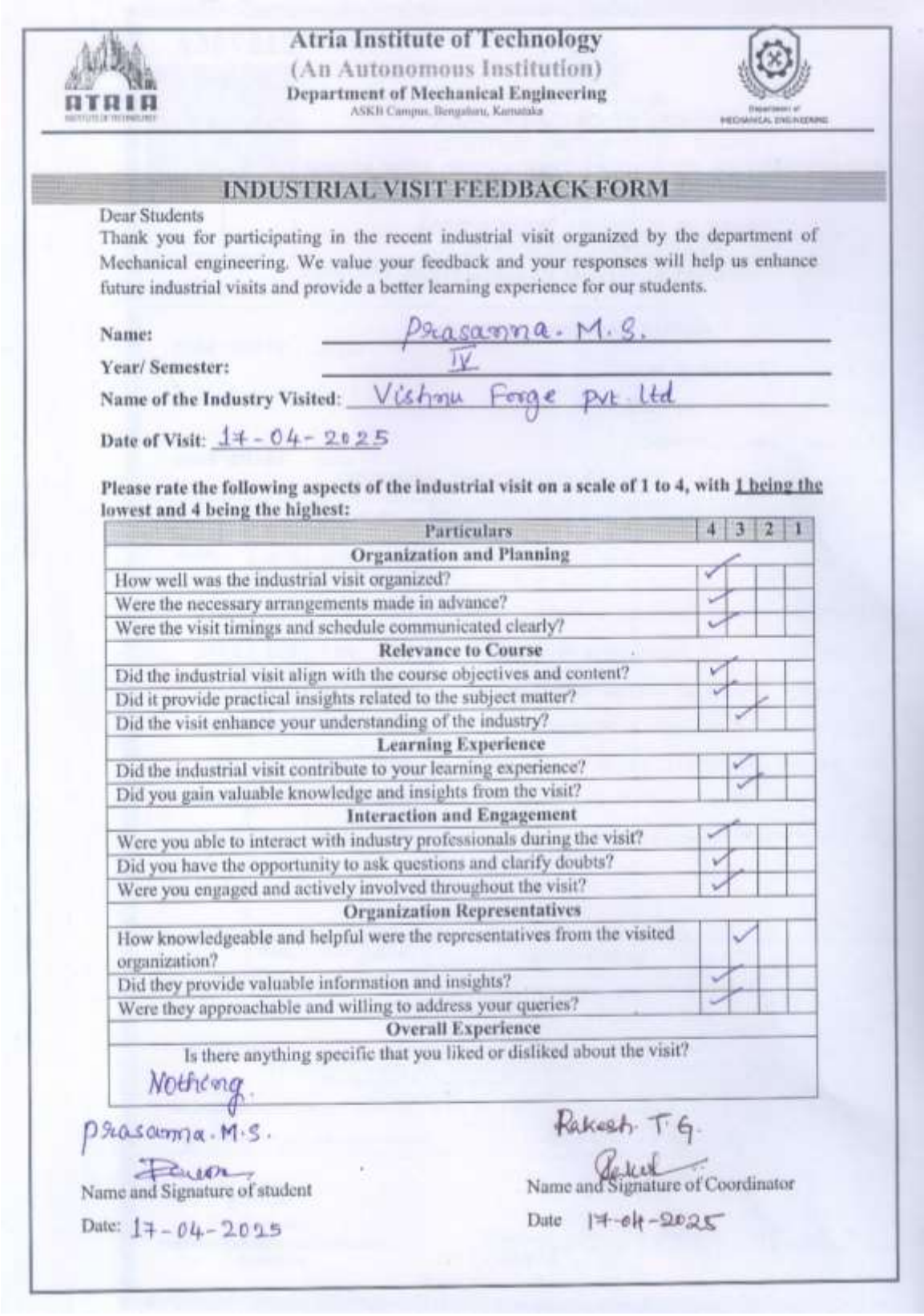
Objectives of the Visit:

✓ To understand the hot forging process and its industrial applications.
✓ To observe real-world manufacturing workflows, from raw material to finished product.
✓ To learn about quality control, automation, and safety measures in forging.
✓ To interact with industry professionals and explore career opportunities in the field.

Vishnu Forge Industries Limited (VFIL) is a Bangalore-based public limited company established in 1963, initially as a partnership firm. They specialize in manufacturing forgings with a strong presence in the automotive, railway, and other industrial sectors. VFIL has been forging for over six decades, serving over 1,000 customers. They are also in the process of setting up a new unit in Tumkur to expand their export business.

VFIL works with wide range of materials to meet diverse need of customers. They specialize in forging carbon, alloy and stainless steel including creep resistant steels as well as aluminium alloys and copper. Their operations encompass forging, rough machining, and heat treatment. Additionally, they provide fully finished components ready for assembly, ensuring convenience and efficiency for their clients.

Dept. of ME, Atria I T 1



Atria Institute of Technology
(An Autonomous Institution)
Department of Mechanical Engineering
ASKB Campus, Bengaluru, Karnataka

INDUSTRIAL VISIT FEEDBACK FORM

Dear Students
Thank you for participating in the recent industrial visit organized by the department of Mechanical engineering. We value your feedback and your responses will help us enhance future industrial visits and provide a better learning experience for our students.

Name: Prasanna. M.S.
Year/ Semester: IV
Name of the Industry Visited: Vishnu Forge pvt. ltd
Date of Visit: 17-04-2025

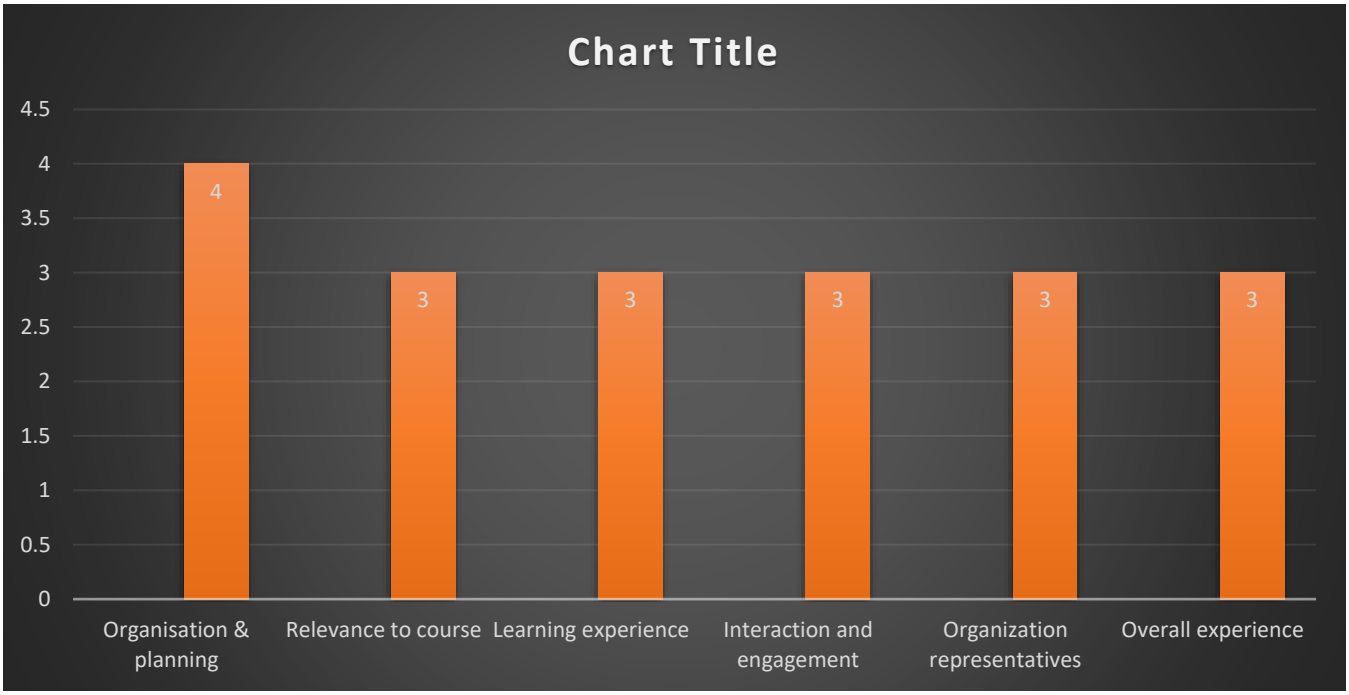
Please rate the following aspects of the industrial visit on a scale of 1 to 4, with 1 being the lowest and 4 being the highest:

Particulars	4	3	2	1
Organization and Planning				
How well was the industrial visit organized?	✓			
Were the necessary arrangements made in advance?	✓			
Were the visit timings and schedule communicated clearly?	✓			
Relevance to Course				
Did the industrial visit align with the course objectives and content?	✓			
Did it provide practical insights related to the subject matter?	✓			
Did the visit enhance your understanding of the industry?		✓		
Learning Experience				
Did the industrial visit contribute to your learning experience?		✓		
Did you gain valuable knowledge and insights from the visit?		✓		
Interaction and Engagement				
Were you able to interact with industry professionals during the visit?	✓			
Did you have the opportunity to ask questions and clarify doubts?	✓			
Were you engaged and actively involved throughout the visit?	✓			
Organization Representatives				
How knowledgeable and helpful were the representatives from the visited organization?		✓		
Did they provide valuable information and insights?	✓			
Were they approachable and willing to address your queries?	✓			
Overall Experience				
Is there anything specific that you liked or disliked about the visit? Nothing.				

Prasanna. M.S.
Name and Signature of student
Date: 17-04-2025

Rakesh. T.G.
Name and Signature of Coordinator
Date 17-04-2025

Sample feedback of Industry visit from students



Feedback analysis of Industry visit from students

Conclusion:

The feedback of industrial visit is collected from students pertaining to various parameters of evaluation. In the above sample of feedback analysis, it is observed that the students need industry officials to interact, engage and demonstrate more for the better understanding of real world problems. This will be considered as paramount requirement and we will encourage such engagements to maximize the benefits of industrial visits.

Table 12: List of Students projects funded by KSCST year wise

Sl.No	Academic Year	Project Name	USN	STUDENT NAME	Faculty In charge
1.	2024-25	Investigation on tribological properties of graphene reinforced copper	1AT22ME402	N M Yashas	Dr. Praveen Kumar B.C
			1AT21ME001	Mr. Ankith Gowda C	
			1AT21ME003	Mr. Mohammed Uwais	
			1AT21ME006	Ms. Prerana R	
2.		Innovative process of LPG generation and fuel production	1AT21ME007	Mr. RakshitH C	Dr. Srinivas Chari V
			1AT21ME009	Mr. Rohith S	
			1AT21ME010	Mr. Shakeel IqbaL	
			1AT21ME014	Mr. Vishnu Prasad KN	
3.		Study on microstructure, mechanical properties and machinability by direct laser deposition	1AT21ME015	Mr. Vishwanath S Thadi	Dr. Srinivas Chari V
			1AT21ME005	Mr. PM Arshad	
			1AT21ME008	Mr. Raul Alwin Dias	
			1AT22ME400	Mr. Abhishek M	
4.	2023-24	Design and fabrication of new generation automated 360^0 drilling machine	1AT17ME350	Mr. Harshith v. Patil	Dr. Harish Kumar
			1AT20ME016	Mr. Ganesh Gowtham J.	
			1AT20ME044	Mr. Varun N.	
5.		Design and fabrication of speed bump by using non-Newtonian fluid	1AT20ME014	Mr. Dhanu Shekar V.	Mr. Anil Kumar B. N
			1AT20ME027	Mr. Mukul Rajkumar	
			1AT20ME032	Mr. Sai Pavan B. G.	
			1AT20ME036	Mr. Sujeeth Kumar	
6.	2022-23	Design and fabrication of IOT based smart flexible air purifier for underground and surface mining	1AT19ME037	MR. Sridharan S	Dr. Harish Kumar N S
			1AT19ME010	MR. devvrat Tripathi	
			1AT19ME014	MR. Hemanth kumar R	
			1AT19ME030	MR. Prashanth S	
7.		Synthesis and characterization of graphene reinforced copper nano composites	1AT19ME026	N Arjun Naık	Mr. Praveen Kumar B.C
			1AT19ME028	Srikanth ParuchurI	
			1AT19ME036	Sayyad Abid Ali	
8.	2021-22	Eco friendly corrugated bamboo-composite sheets for roofing applications	1AT18ME024	Mr. Kownain Ahmed	Mr. Anjan Kumar D
			1AT18ME041	Sheik Irfan	
			1AT16ME045	Mohamed Ibrahim Junaid	
			1AT18ME046	Mr. Sumukh S Kashyap	