

Department of Aeronautical Engineering

Date: 22.09.2025

Action taken report of tenth Board of Studies Meeting

The tenth Board of Studies (BoS) meeting was held on 02.09.2025. The action taken on the feedback and suggestions given by the BoS members are listed below.

S.No.	Course Code / Title	Suggestions given by BoS members	Action taken
Dr. G Suresh Kannan, the University Nominee			
1	24AE520 Airframe Maintenance and Repair	Suggested to change the title of Unit 1 as Sheet Metal Repair in Aircraft	The title has been changed as per the suggestion
2	Vertical V	Suggested to change the title of Vertical V as Emerging Technologies in Aeronautics	The title has been changed as per the suggestion
Dr. S Nadaraja Pillai, the Subject Expert			
1	24AE705 Project Work	Suggested to modify the Course Outcome statements.	The CO statements are modified.
Dr. S Venkatachalam, the Subject Expert			
1	24AE514 Fatigue and Fracture Mechanics	Suggested to include the following topics in Unit 1: Maximum stress, minimum stress, mean stress, stress amplitude and stress ratio	The suggested topics are included in Unit 1.
2	24AE513 Theory of Elasticity	Suggested to add the following text books: 1. Martin H. Sadd, "Elasticity: Theory, Applications, and Numerics" Academic Press Inc, 3rd edition, 2014, 2. Barber J.R., "Elasticity", Springer, 3rd edition, 2010.	The suggested books are added as text books.
3	24AE515 Vibration and Aeroelasticity	<ul style="list-style-type: none"> • Suggested to include the topic Matrix iteration method instead of Holzer method in Unit 4 • Suggested to add a text book viz. 	The Suggestions are implemented.

S.No.	Course Code / Title	Suggestions given by BoS members	Action taken
		S.S. Rao, "Mechanical Vibrations", Pearson education, 4th edition, 2013.	
4	24AE420 Computer Aided Simulation Laboratory	Suggested to include the experiment: Static Structural Analysis of a Plate with Hole using 2D bar element	The suggested experiment has been included in the syllabus.
Mr. E Baluchamy, the Industry expert			
1	24AE514 Fatigue and Fracture Mechanics	Suggested to add a reference book Alten F. Grandt Jr., "Fundamentals of Structural Integrity: Damage Tolerant Design and Nondestructive Evaluation", Wiley-Interscience; 1st edition, 2003.	The suggested book has been included as reference.
Mr. K Mukesh, the Alumnus member			
1	the member felt that the contents of the syllabi are considerably good and endorsed the suggestions of the above expert members.		

RJ
22/09
Chairman – BoS / Aero

C.M.
Principal
22.9.24

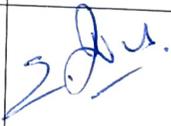


HINDUSTHAN INSTITUTE OF TECHNOLOGY
COIMBATORE-641032
(An Autonomous Institution)
Department of Aeronautical Engineering



Attendance – 10th Board of Studies Meeting

Date: 02.09.2025

S. No.	Name & Designation	Position	Signature
1	Dr. R Thirumalai, Professor & Head, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Chairman	 02/09/25
2	Dr. G Suresh Kannan Associate Professor Department of Mechanical Engineering Coimbatore Institute of Technology, Coimbatore.	University Nominee	 02/09/25
3	Dr. S Nadaraja Pillai, Associate Dean – Academics & Professor, Aerospace Engineering, SASTRA Deemed University, Thanjavur.	Subject Expert	ONLINE
4	Dr. S Venkatachalam Assistant Professor School of Aerospace Engineering, Karunya Institute of Technology & Sciences (Deemed to be University) Coimbatore	Subject Expert	ONLINE
5	Mr. Baluchamy Eswaran Project Manager – FEA Simgrosys Consulting Service Private Ltd., Coimbatore.	Industry Expert	
6	Mr. K Mukesh Senior Engineer-Software (AI) SLK Software Bangalore	Alumnus Member	ONLINE

S. No.	Name & Designation	Position	Signature
7	Dr. K P Dhanabalakrishnan Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	
8	Mr. M Moses Devapasanna Assistant Professor Department of Aeronautical Engineering, Hindusthan Institute of Technology	Internal member	
9	Dr. Abuthakir J Associate Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	
10	Mr. M Harish Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	
11	Mr. S Tamilselvan Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	
12	Mr. N Maheswaran Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	
13	Mr. V Ganesan Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	
14	Mr. S Mohammed Meeran Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	

R. Sub-0209
Chairman – BoS / Aeronautical Engg.

C.M.G.
Principal
14.9.25



HINDUSTHAN INSTITUTE OF TECHNOLOGY
COIMBATORE-641032
(An Autonomous Institution)
Department of Aeronautical Engineering



Date: 04.09.2025

Minutes of 10th Board of Studies Meeting

The 10th Board of Studies (BoS) meeting was held on 02.09.2025 (Tuesday) 11 am at Board room, Hindusthan Institute of Technology, Coimbatore.

The following members were present:

S. No.	Name & Designation	Position
1	Dr. R Thirumalai, Professor & Head, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Chairman
2	Dr. G Suresh Kannan Associate Professor Department of Mechanical Engineering Coimbatore Institute of Technology, Coimbatore.	University Nominee
3	Dr. S Nadaraja Pillai, Associate Dean – Academics & Professor, Aerospace Engineering, SASTRA Deemed University, Thanjavur.	Subject Expert
4	Dr. S Venkatachalam Assistant Professor School of Aerospace Engineering, Karunya Institute of Technology & Sciences (Deemed to be University), Coimbatore	Subject Expert
5	Mr. Baluchamy Eswaran Project Manager – FEA Simgrosys Consulting Service Private Ltd., Coimbatore.	Industry Expert
6	Dr. K Mukesh Senior Engineer-Software (AI) SLK Software Bangalore	Alumnus Member
7	Mr. M Moses Devaprasanna Assistant Professor Department of Aeronautical Engineering, Hindusthan Institute of Technology	Internal member

S. No.	Name & Designation	Position
8	Dr. K P Dhanabalakrishnan Professor Department of Aeronautical Engineering, Hindusthan Institute of Technology	Internal member
9	Dr. J Abuthakir Associate Professor Department of Aeronautical Engineering, Hindusthan Institute of Technology	Internal member
10	Mr. S Tamilselvan Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
11	Mr. M Harish Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
12	Mr. N Maheswaran Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
13	Mr. V Ganesan Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
14	Mr. S Mohammed Meeran Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member

Agenda:

- 1 Welcome address
- 2 Vision, Mission and Program Educational Objectives
- 3 Action taken report of 9th BoS meeting
- 4 To pass and approve the Syllabi for the courses of Verticals III, IV & V and Project Work - Regulation 2024
- 5 Any other matters
- 6 Vote of thanks

Courses offered in Verticals III, IV and V – Regulation 2024

VERTICAL III: AIRCRAFT STRUCTURES AND MATERIALS	
Course Code	Course Title
24AE513	Theory of Elasticity
24AE514	Fatigue and Fracture Mechanics
24AE515	Vibration and Aeroelasticity
24AE516	Experimental Stress Analysis
24AE517	Composite Materials and Structures
24AE518	Aerospace Materials

VERTICAL IV: AIRCRAFT MAINTENANCE	
Course Code	Course Title
24AE519	Aircraft General Engineering and Maintenance Practices
24AE520	Airframe Maintenance and Repair
24AE521	Aero Engine Maintenance and Repair
24AE522	Helicopter Maintenance
24AE523	Aircraft Rules and Regulations CAR – Part I
24AE524	Aircraft Rules and Regulations CAR – Part II

VERTICAL V: EMERGING TECHNOLOGIES IN AERONAUTICS	
Course Code	Course Title
24AE525	Non-Destructive Testing
24AE526	Robotics
24AE527	Wind Energy Technology
24AE528	CAD/CAM
24AE529	Smart Materials and Structures
24AE530	Additive Manufacturing

Courses offered in Semesters VII and VIII – Regulation 2024

Semester	Course Code & Title
VII	24AE420 Computer Aided Simulation Laboratory
	24AE421 Airframe Repair Laboratory
VIII	24AE705 Project Work

Minutes of the meeting:

- The meeting started with a welcome address by the BoS Chairman Dr. R Thirumalai. He extended warm welcome to all the members.
- The vision, the mission and the program educational objectives of the department were presented.
- Followed by the Action taken report of the 9th BoS meeting was presented.
- Subsequently, Mr. M Moses Devaprasanna, BoS Coordinator presented the Syllabi for the courses of Verticals III, IV & V and for the courses offered in VII and VIII semesters in Regulation 2024.
- The following feedback and suggestions were given by the members of Board of Studies.

Dr. G Suresh Kannan, University Nominee		
S.No.	Reference	Suggestion
1	24AE520 Airframe Maintenance and Repair	Change the title of unit 1 as Sheet Metal Repair in Aircraft
2	Vertical V	Change the title of Vertical V as Emerging Technologies in Aeronautics

Dr. S Nadaraja Pillai, Subject Expert		
S.No.	Reference	Suggestion
1	24AE705 Project Work	Modify the Course Outcome statements.

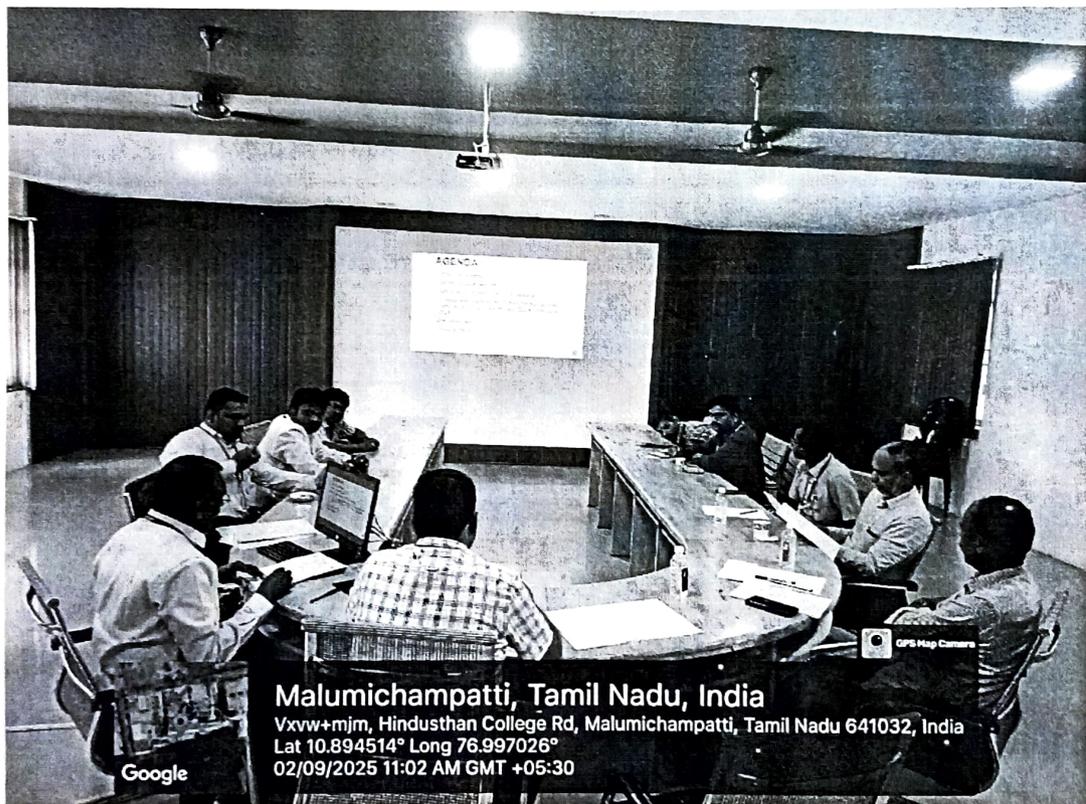
Dr. S Venkatachalam, Subject Expert		
S.No.	Reference	Suggestion
1	24AE514 Fatigue and Fracture Mechanics	Include the following topics in Unit 1: Maximum stress, minimum stress, mean stress, stress amplitude and stress ratio
2	24AE513 Theory of Elasticity	Add two more text books viz. 1. Martin H. Sadd, "Elasticity: Theory, Applications, and Numerics" Academic Press Inc, 3rd edition, 2014. 2. Barber J.R., "Elasticity", Springer, 3rd edition, 2010.
3	24AE515 Vibration and Aeroelasticity	Include Matrix iteration method instead of Holzer method in Unit 4 Add a text book viz. S.S. Rao, "Mechanical Vibrations", Pearson education, 4th edition, 2013.
4	24AE420 Computer Aided Simulation Laboratory	Include the experiment: Static Structural Analysis of a Plate with Hole using 2D bar element

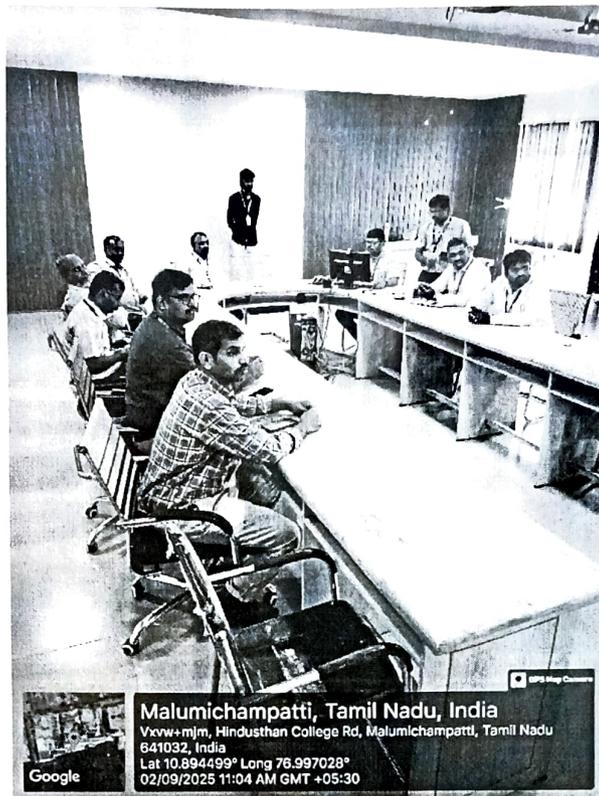
Mr. E Baluchamy, Industry Expert		
S.No.	Reference	Suggestion
1	24AE514 Fatigue and Fracture Mechanics	Add a reference book Alten F. Grandt Jr., "Fundamentals of Structural Integrity: Damage Tolerant Design and Nondestructive Evaluation", Wiley-Interscience; 1st edition, 2003.

Dr. K Mukesh the Alumnus member felt that the contents of the syllabi are considerably good and endorsed the suggestions of the above expert members.

The meeting came to an end with a vote of thanks.

PHOTOGRAPHS:





Malumichampatti, Tamil Nadu, India
Vvww+mjm, Hindusthan College Rd, Malumichampatti, Tamil Nadu
641032, India
Lat 10.894499° Long 78.997023°
02/09/2025 11:04 AM GMT +05:30



Malumichampatti, Tamil Nadu, India
Vvww+mjm, Hindusthan College Rd, Malumichampatti, Tamil Nadu 641032, India
Lat 10.894488° Long 78.997032°
02/09/2025 11:03 AM GMT +05:30

Rene
07/09

Chairman – BoS / Aeronautical Engg.

C.M.
Principal
4.9.25

Department of Aeronautical Engineering

Date: 01.04.2025

Action taken report of Ninth Board of Studies Meeting

The ninth Board of Studies (BoS) meeting was held on 12.03.2025 (Wednesday) at 11 am in Board room, Hindusthan Institute of Technology, Coimbatore. The action taken on the feedback and suggestions given by the BoS members are as follows.

S.No.	Suggestions given by BoS member	Action taken	Justifications
Dr. G Suresh Kannan, the University Nominee			
1	Reframe the Course objective statements appropriately.	The course objective statements are reframed as per the suggestion	Gives a clear picture of learning objectives.
Dr. S Nadaraja Pillai, the Subject Expert			
1	Update the text books and references with latest editions wherever possible	Text books and references are updated with latest editions	Latest editions would include more examples and advanced topics
Dr. S Venkatachalam, the Subject Expert			
1	In 24AE509 Finite Element Methods, the titles of Units 2 and 3 can be changed respectively as "One Dimensional Elements" and Two-Dimensional Elements"	The titles of Units 2 and 3 are changed according to the suggestions.	The titles are relevant to the contents
2	In Vertical II, the course 24AE507 Numerical Methods in Fluid Dynamics must be a pre-requisite for the courses 24AE508 Computational Heat Transfer and 24AE510 Computational Fluid Dynamics.	The course 24AE507 Numerical Methods in Fluid Dynamics is mentioned as prerequisite for the courses 24AE508 Computational Heat Transfer and 24AE510 Computational Fluid Dynamics.	Ensures that the students learn the beginner level course before learning advanced course
Mr. K Mukesh, the Alumnus member			
1	Include the topic Blade Element Theory in 24AE503 Helicopter Aerodynamics	The topic is included in Unit IV	Gives deeper understanding of Aerodynamics design



HINDUSTHAN INSTITUTE OF TECHNOLOGY

An Autonomous Institution

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai, Accredited with "A" Grade by NAAC)

Valley Campus, Pollachi Main Road, Coimbatore 641 032.



S.No.	Suggestions given by BoS member	Action taken	Justifications
Mr. E Baluchamy, the Industry expert			
1	Felt that the contents of the syllabi are considerably good and also endorsed the suggestions of the other members.		

RS
02/04
Chairman – BoS / Aero

C.M.
Principal
02-04-25



HINDUSTHAN INSTITUTE OF TECHNOLOGY
COIMBATORE-641032
(An Autonomous Institution)
Department of Aeronautical Engineering



Date: 18.03.2025

Minutes of 9th Board of Studies Meeting

The 9th Board of Studies (BoS) meeting was held on 12.03.2025 (Wednesday) 11 am at Board room, Hindusthan Institute of Technology, Coimbatore.

The following members were present:

S. No.	Name & Designation	Position
1	Dr. R Thirumalai, Professor & Head, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Chairman
2	Dr. G Suresh Kannan Associate Professor Department of Mechanical Engineering Coimbatore Institute of Technology, Coimbatore.	University Nominee
3	Dr. S Nadaraja Pillai, Associate Dean – Academics & Professor, Aerospace Engineering, SASTRA Deemed University, Thanjavur.	Subject Expert
4	Dr. S Venkatachalam Assistant Professor School of Aerospace Engineering, Karunya Institute of Technology & Sciences (Deemed to be University), Coimbatore	Subject Expert
5	Mr. Baluchamy Eswaran Project Manager – FEA Simgrosys Consulting Service Private Ltd., Coimbatore.	Industry Expert
6	Mr. K Mukesh Ph.D.(Research Scholar) Department of Applied Mechanics, IIT Madras, Chennai.	Alumnus Member
6	Mr. M Moses Devaprasanna Assistant Professor Department of Aeronautical Engineering, Hindusthan Institute of Technology	Internal member

S. No.	Name & Designation	Position
7	Dr. P Vasanthakumar Associate Professor Department of Aeronautical Engineering, Hindusthan Institute of Technology	Internal member
8	Mr. M Harish Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
9	Mr. S Tamilselvan Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
10	Mr. N Maheswaran Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
11	Mr. V Ganesan Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
12	Mr. R Sakthivel Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
13	Mr. S Mohammed Meeran Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member

Agenda:

- 1 Welcome address
- 2 Vision, Mission and Program Educational Objectives
- 3 Action taken report of 8th BoS meeting
- 4 To pass and approve the Syllabus for the courses of Verticals I & II - Regulation 2024
- 5 Any other matters
- 6 Vote of thanks

Courses under Verticals I and II – Regulation 2024

Course Code	Course Title	Assessment			L	P	T	J	Credit
		CIA	ESE	Total					
VERTICAL I: AERODYNAMICS AND PROPULSION									
24AE501	Experimental Aerodynamics	40	60	100	3	0	0	0	3
24AE502	Industrial Aerodynamics	40	60	100	3	0	0	0	3
24AE503	Helicopter Aerodynamics	40	60	100	3	0	0	0	3
24AE504	Principles of Combustion	40	60	100	3	0	0	0	3
24AE505	Rockets and Missiles	40	60	100	3	0	0	0	3
24AE506	Cryogenic Propulsion	40	60	100	3	0	0	0	3

Course Code	Course Title	Assessment			L	P	T	J	Credit
		CIA	ESE	Total					
VERTICAL II: COMPUTATIONAL ENGINEERING									
24AE507	Numerical Methods in Fluid Dynamics	40	60	100	3	0	0	0	3
24AE508	Computational Heat Transfer	40	60	100	3	0	0	0	3
24AE509	Finite Element Methods	40	60	100	3	0	0	0	3
24AE510	Computational Fluid Dynamics	40	60	100	3	0	0	0	3
24AE511	Computer Aided Design and Analysis	40	60	100	3	0	0	0	3
24AE512	Grid Generation Techniques	40	60	100	3	0	0	0	3

Minutes of the meeting:

- The meeting started with a welcome address by the BoS Chairman Dr. R Thirumalai. He extended warm welcome to all the members.
- The vision, the mission and the program educational objectives of the department were presented.
- Followed by the Action taken report of the 8th BoS meeting was presented.
- Subsequently, the Syllabi for the courses of Verticals I & II - Regulation 2024 were presented and discussed with members of the board.
- The following feedback and suggestions were given by the members of Board of Studies.

Dr. G Suresh Kannan, the University Nominee suggested that

- ◇ The preposition “To” may be added at the beginning of every Course Objective statement uniformly in all courses.

Dr. S Nadaraja Pillai, the Subject Expert gave suggestions to

- ◇ Update the text books and references with latest editions wherever possible.

Dr. S Venkatachalam, the Subject Expert suggested that

- ◇ In 24AE509 Finite Element Methods, the titles of Units 2 and 3 can be changed respectively as “One Dimensional Elements” and Two Dimensional Elements”.
- ◇ In Vertical II, the course 24AE507 Numerical Methods in Fluid Dynamics must be a pre-requisite for the courses 24AE508 Computational Heat Transfer and 24AE510 Computational Fluid Dynamics.

The Industry expert **Mr. E Baluchamy** felt that the contents of the syllabi are considerably good and endorsed the suggestions of the above expert members.

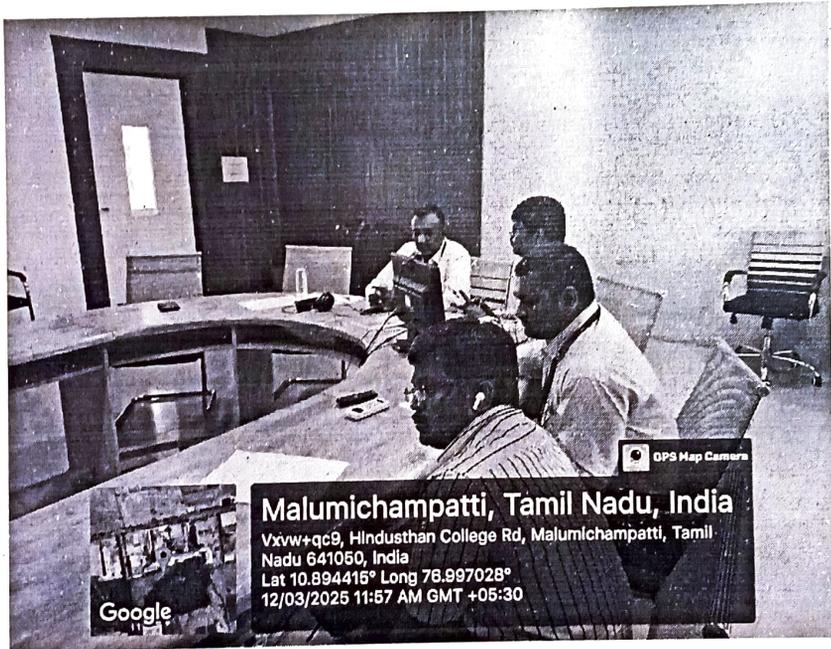
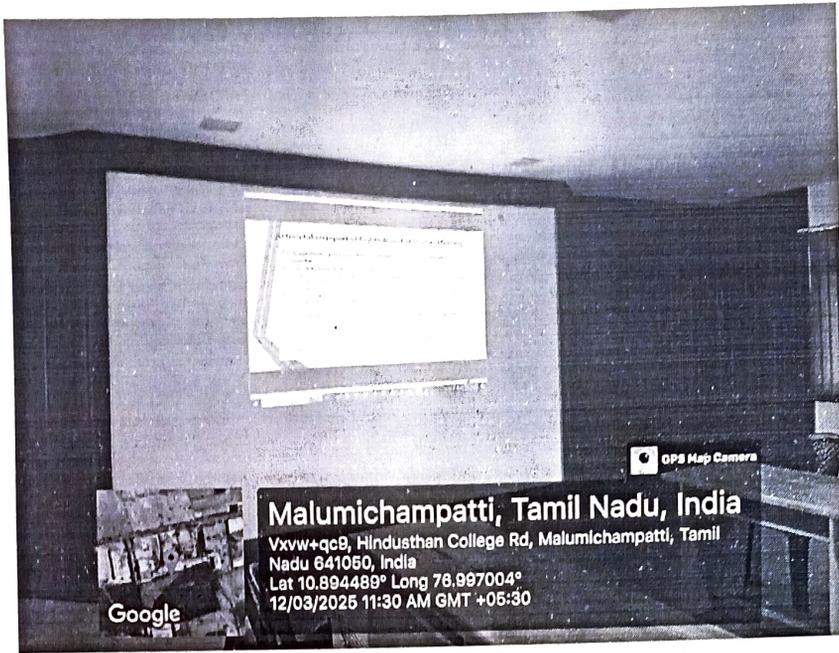
Mr. K Mukesh the Alumnus member gave suggestions to

- ◇ Include the topic Blade Element Theory in 24AE503 Helicopter Aerodynamics.

The meeting was concluded with a vote of thanks from the Chairman.

PHOTOGRAPHS:





RK 19/03

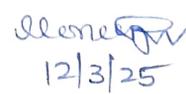
Chairman – BoS / Aeronautical Engg.

C.N.V.
Principal
19.03.25

HINDUSTHAN INSTITUTE OF TECHNOLOGY
COIMBATORE-641032
(An Autonomous Institution)
Department of Aeronautical Engineering

Attendance – 9th Board of Studies Meeting

Date: 12.03.2025

S. No.	Name & Designation	Position	Signature
1	Dr. R Thirumalai, Professor & Head, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Chairman	
2	Dr. G Suresh Kannan Associate Professor Department of Mechanical Engineering Coimbatore Institute of Technology, Coimbatore	University Nominee	 12/03/2025
3	Dr. S Nadaraja Pillai, Associate Dean – Academics & Professor, Aerospace Engineering, SASTRA Deemed University, Thanjavur.	Subject Expert	ONLINE
4	Dr. S Venkatachalam Assistant Professor School of Aerospace Engineering, Karunya Institute of Technology & Sciences (Deemed to be University)	Subject Expert	
5	Mr. Baluchamy Eswaran Project Manager – FEA Simgrosys Consulting Service Private	Industry Expert	ONLINE
6	Mr. K Mukesh Ph.D.(Research Scholar) Department of Applied Mechanics IIT Madras, Chennai.	Alumnus Member	ONLINE
6	Mr. M Moses Devaprasanna Assistant Professor Department of Aeronautical Engineering, Hindusthan Institute of Technology	Internal member	 12/3/25

S. No.	Name & Designation	Position	Signature
7	Dr. K P Dhanabalakrishnan Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	K.P. Dhanabalakrishnan 12.3.25
8	Dr. P Vasanthakumar Associate Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	P. Vasanthakumar 12/03/25
9	Mr. M Harish Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	M. Harish 12/3/25
10	Mr. S Tamilselvan Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	S. Tamilselvan 12/3/25
11	Mr. N Maheswaran Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	N. Maheswaran 12/3/25
12	Mr. V Ganesan Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	V. Ganesan 12/03/25
13	Mr. R Sakthivel Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	R. Sakthivel 12/03/25
14	Mr. S Mohammed Meeran Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member	S. Mohammed Meeran 12/03/25

Chairman – BoS / Aeronautical Engg.

Principal
12.03.25



Department of Aeronautical Engineering

Date: 09.11.2024

Action taken report of Eighth Board of Studies Meeting

The 8th Board of Studies (BoS) meeting was held in hybrid mode on 07.11.2024 (Thursday) 11 am at Board room, Hindusthan Institute of Technology, Coimbatore. The action taken on the feedback and suggestions given by the BoS members are as follows.

S.No.	Suggestions given by BoS member	Action taken	Justifications
Dr. G Suresh Kannan, the University Nominee			
1	Redefine the experiment titles in 24AE415 Aircraft Structures Laboratory	The experiment titles have been redefined.	The title is given such that the outcome of the experiment is explicit.
2	Replace the existing Program Outcomes (POs) with the new POs specified by NBA	The existing POs are replaced with the new POs as specified by NBA	POs updated
3	Give equal number of Course Outcomes (COs) for same category (Theory/Practical) of courses.	Five COs are defined for each course.	Facilitates uniformity in question paper pattern and evaluation method for all courses
4	Include CO-Program Specific Outcomes (PSOs) mapping for each course.	For each course, the COs are mapped with the PSOs also.	Helpful to find the attainment of PSOs
Dr. S Nadaraja Pillai, the Subject Expert			
1	Slightly reduce the number of topics in unit 1 of 24AE411 Propulsion – II	Two topics has been removed in unit 1 to reduce the content of the syllabus Topic 1: Engine/airframe Integration of vehicle Topic 2: Various types of scramjet combustors and fuel injection schemes	Facilitates students to gain more focus and deeper understanding of essential topics.

S.No.	Suggestions given by BoS member	Action taken	Justifications
2	Include topics on Off-design operation of jet engine in 24AE411 Propulsion – II	Off-design operation of jet engine topics is not possible to be included in this course as it deals mostly with rocket propulsion and few hypersonic air breathing propulsion topics	There is no separate course on Rocket propulsion to include Off-design operation topics in this course.
3	Specify only one text book which covers 90% of the topics in the syllabus and 3 to 5 references	Prescription of 3 text books and 3 references for each course is made uniform to all branches.	For some courses, more than one text book is necessary to cover all the topics given in the syllabus.
4	Give 1 tutorial hour each for 24AE414 High Speed Aerodynamics (analytical subject) and 24AE417 Flight Dynamics (two subjects clubbed together)	As the Curriculum is already approved and finalized, it is proposed to implement the suggestions in the upcoming regulations.	Taken forward for future Curriculum improvement.
5	Make sure that the GATE syllabus is covered	Essential topics are already included in Professional core and elective courses.	Equip students with sufficient knowledge and analytical skills to appear for competitive exams like GATE.
Dr. S Venkatachalam, the Subject Expert			
1	Avoid repetitive topics already covered in lower semester courses (like Isentropic flow through nozzles in 24AE411 Propulsion – II)	Isentropic flow through rocket nozzles topic has not been covered in the lower semester courses.	The topic covers the mathematical equations related to flow through rocket nozzles and includes numerical problems.
2	Include the text book: Structural Mechanics by Timoshenko and Gere for 24AE412 Aircraft Structures – II	Text book included: James M. Gere, Stephen Timoshenko, Mechanics of materials, PWS Publishing Company, 1997	Suggestion implemented.

S.No.	Suggestions given by BoS member	Action taken	Justifications
3	Avoid using abbreviations such as NextGen in 24AE413 AVIONICS	NextGen abbreviation has been removed	Suggestion implemented.
4	Change the Experiment No 1 in 24AE415 AIRCRAFT STRUCTURES LABORATORY as it would be covered in Strength of Materials Laboratory	Experiment No 1 is not changed.	Experiment on deflection of beam under different end conditions is not covered in Strength of Materials Laboratory
5	Redefine the experiment titles in 24AE416 PROPULSION LABORATORY	Experiment titles has been refined. Velocity profiles of free jet and wall jet titles have been changed to Study of characteristics of free and wall jet set up	The title is given such that the outcome of the experiment is explicit.
6	Increase the number of contact hours for unit 2 in 24AE417 Flight Dynamics as it may be insufficient to solve problems.	Contact hours for Unit-2 is increased from 9 to 10 hours	Total hours are balanced to solve Numerical Problems.
Mr. K Mukesh, the Alumnus member			
1	Correct the author's name of Text book 1 in 24AE412 AIRCRAFT STRUCTURES - II	The author's name is corrected as Megson T H G.	Correction made
Mr. E Baluchamy, the Industry expert			
1	Felt that the contents of the syllabi are considerably good and also endorsed the suggestions of the other members.		

K.P. Karanahalli
Chairman – BoS / Aero
9/4/24

C.M.G.
Principal
9.11.24



HINDUSTHAN INSTITUTE OF TECHNOLOGY
COIMBATORE-641032
(An Autonomous Institution)
Department of Aeronautical Engineering



Date: 08.11.2024

Minutes of 8th Board of Studies Meeting

The 8th Board of Studies (BoS) meeting was held in hybrid mode on 07.11.2024 (Thursday) 11 am at Board room, Hindusthan Institute of Technology, Coimbatore.

The following members were present:

S. No.	Name & Designation	Position
1	Dr. K P Dhanabalakrishnan, Professor & Head, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Chairman
2	Dr. G Suresh Kannan Associate Professor Department of Mechanical Engineering Coimbatore Institute of Technology, Coimbatore.	University Nominee
3	Dr. S Nadaraja Pillai, Associate Dean – Academics & Professor, Aerospace Engineering, SASTRA Deemed University, Thanjavur.	Subject Expert
4	Dr. S Venkatachalam Assistant Professor School of Aerospace Engineering, Karunya Institute of Technology & Sciences (Deemed to be University) Coimbatore	Subject Expert
5	Mr. Baluchamy Eswaran Project Manager – FEA Simgrosys Consulting Service Private Ltd., Coimbatore.	Industry Expert
6	Mr. K Mukesh Ph.D.(Research Scholar) Department of Applied Mechanics IIT Madras, Chennai.	Alumnus Member

S. No.	Name & Designation	Position
6	Mr. M Moses Devaprasanna Assistant Professor Department of Aeronautical Engineering, Hindusthan Institute of Technology	Internal member
7	Mr. M Harish Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
8	Mr. S Tamilselvan Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
9	Mr. N Maheswaran Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
10	Mr. V Ganesan Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
11	Mr. R Sakthivel Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member
12	Mr. S Mohammed Meeran Assistant Professor Department of Aeronautical Engineering Hindusthan Institute of Technology	Internal member

Agenda:

- 1 Welcome address
- 2 Vision, Mission and Program Educational Objectives
- 3 Action taken report of 7th BoS meeting
- 4 To pass and approve the Syllabus for 5th and 6th semester courses of Regulation 2024
- 5 Any other matters
- 6 Vote of thanks

Minutes of the meeting:

- The meeting started with a welcome address by the BoS Chairman Dr. K P Dhanabalakrishnan. He extended warm welcome to all the members.
- The vision, the mission and the program educational objectives of the department were presented.
- Followed by the Chairman presented the Action taken report of the 7th BoS meeting.
- Subsequently, the Syllabi for 5th and 6th semester courses of Regulation 2024 were presented and discussed with members of the board.
- The following feedback and suggestions were given by the members of Board of Studies.

Dr. G Suresh Kannan, the University Nominee gave suggestions to

- ◇ Redefine the experiment titles in 24AE415 Aircraft Structures Laboratory
- ◇ Replace the existing Program Outcomes (POs) with the new POs specified by NBA
- ◇ Give equal number of Course Outcomes (COs) for same category (Theory/Practical) of courses.
- ◇ Include CO-Program Specific Outcomes (PSOs) mapping for each course.

Dr. S Nadaraja Pillai, the Subject Expert gave suggestions to

- ◇ Slightly reduce the number of topics in unit 1 of 24AE411 Propulsion – II
- ◇ Include topics on Off-design operation of jet engine in 24AE411 Propulsion – II
- ◇ Specify only one text book which covers 90% of the topics in the syllabus and 3 to 5 references.
- ◇ Give 1 tutorial hour each for 24AE414 High Speed Aerodynamics (analytical subject) and 24AE417 Flight Dynamics (two subjects clubbed together)
- ◇ Ensure that the GATE syllabus is covered.

Dr. S Venkatachalam, the Subject Expert gave suggestions to

- ◇ Avoid repetitive topics already covered in lower semester courses (like Isentropic flow through nozzles in 24AE411 Propulsion – II)
- ◇ Include the text book: Structural Mechanics by Timoshenko and Gere for 24AE412 Aircraft Structures – II
- ◇ Avoid using abbreviations such as NextGen in 24AE413 AVIONICS
- ◇ Change the Experiment No 1 in 24AE415 AIRCRAFT STRUCTURES LABORATORY as it would be covered in Strength of Materials Laboratory.
- ◇ Redefine the experiment titles in 24AE416 PROPULSION LABORATORY
- ◇ Increase the number of contact hours for unit 2 in 24AE417 Flight Dynamics as it may be insufficient to solve problems.

The Industry expert **Mr. E Baluchamy** felt that the contents of the syllabi are considerably good and endorsed the suggestions of the above expert members.

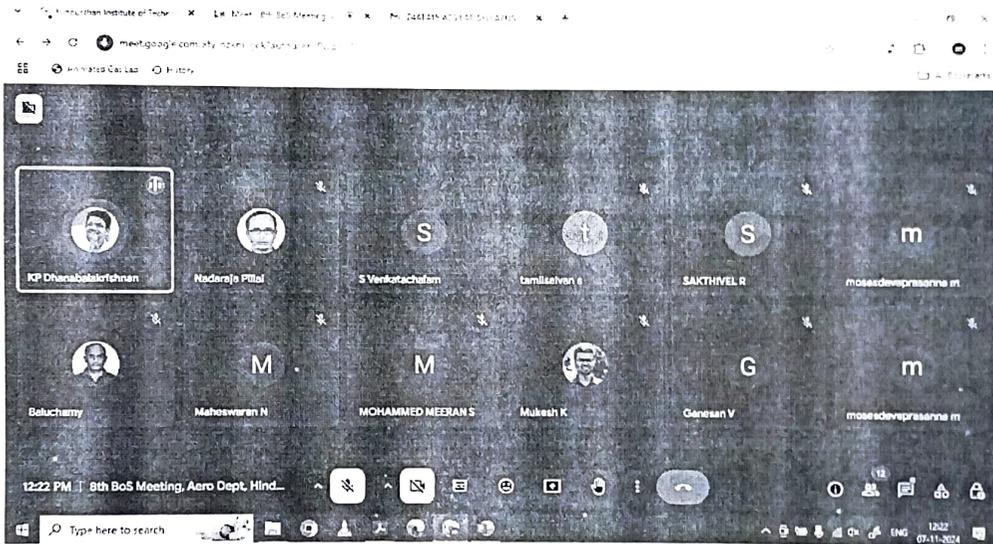
Mr. K Mukesh the Alumnus member gave suggestions to

- ◇ Correct the author name of Text book 1 in 24AE412 AIRCRAFT STRUCTURES - II

The meeting was concluded with a vote of thanks by Mr. M Moses Devapasanna.

PHOTOGRAPHS:





K.P. Dharmabalarishnan
 Chairman – BoS / Aeronautical Engg.
 08/11/24

C.M.G.
 Principal
 9/11/24

HINDUSTHAN INSTITUTE OF TECHNOLOGY, COIMBATORE.

DEPARTMENT OF AERONAUTICAL ENGINEERING

7th Board of Studies Meeting

Date: 15.03.2024

Agenda of the meeting:

1. Welcome address
2. To pass and approve the Syllabus for 7th and 8th semester courses of Regulation 2022
3. To pass and approve the list of courses offered as Open Elective Course-R2022 by Aero Dept. to other departments.
4. To pass and approve the Curriculum for the Regulation 2024
5. To pass and approve the Syllabus for courses offered by the Department from 1st to 4th semester of Regulation 2024
6. Any other matters
7. Vote of thanks



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Department of Aeronautical Engineering

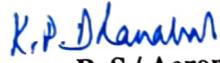


Attendance – 7th Board of Studies Meeting (Virtual Mode)

Date: 15.03.2024

S. No.	Name & Designation	Position	Signature
1	Dr. K P Dhanabalakrishnan, Professor & Head, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Chairman	<i>K.P. Dhanabal</i>
2	Dr. K M Parammasivam Professor Department of Aerospace Engineering MIT Campus, Anna University, Chennai	University Nominee	ONLINE
3	Dr. S Nadaraja Pillai Professor Aerospace Engineering School of Mechanical Engineering, SASTRA Deemed University, Thanjavur.	Subject Expert	ONLINE
4	Dr. S Venkatachalam Assistant Professor School of Aerospace Engineering, Karunya Institute of Technology & Sciences (Deemed to be University) Coimbatore	Subject Expert	ONLINE
5	Mr. Baluchamy Eswaran Project Manager – FEA Simgrosys Consulting Service Private Ltd., Coimbatore.	Industry Expert	ONLINE
6	Mr. K Mukesh Ph.D.(Research Scholar) Department of Applied Mechanics IIT Madras, Chennai.	Alumnus Member	ONLINE
7	Mr. M Harish Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member	<i>M Harish</i>

S. No.	Name & Designation	Position	Signature
8	Mr. S Tamilselvan Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member	
9	Mr. N Maheswaran Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member	
10	Mr. V Ganesan Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member	
11	Mr. R Sakthivel Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member	


Chairman – BoS / Aeronautical Engg.


Principal
15/3/24



HINDUSTHAN INSTITUTE OF TECHNOLOGY
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Department of Aeronautical Engineering



Date: 18.03.2024

Minutes of 7th Board of Studies Meeting

The 7th Board of Studies (BoS) meeting was held on 15.03.2024(Friday) at 2.30 pm in virtual mode held at the Department of Aeronautical Engineering, Hindusthan Institute of Technology, Coimbatore.

The following members were present online:

S. No.	Name & Designation	Position
1	Dr. K P Dhanabalakrishnan, Professor & Head, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Chairman
2	Dr. K M Parammasivam Professor Department of Aerospace Engineering MIT Campus, Anna University, Chennai	University Nominee
3	Dr. S Nadaraja Pillai Professor Aerospace Engineering School of Mechanical Engineering, SASTRA Deemed University, Thanjavur.	Subject Expert
4	Dr. S Venkatachalam Assistant Professor School of Aerospace Engineering, Karunya Institute of Technology & Sciences (Deemed to be University) Coimbatore	Subject Expert
5	Mr. Baluchamy Eswaran Project Manager – FEA Simgrosys Consulting Service Private Ltd., Coimbatore.	Industry Expert
6	Mr. K Mukesh Ph.D.(Research Scholar) Department of Applied Mechanics IIT Madras, Chennai.	Alumnus Member

S. No.	Name & Designation	Position
7	Mr. M Harish Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member
8	Mr. S Tamilselvan Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member
9	Mr. N Maheswaran Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member
10	Mr. V Ganesan Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member
11	Mr. R Sakthivel Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member

Agenda:

- 1 Welcome address
- 2 To pass and approve the Syllabus for 7th and 8th semester courses of Regulation 2022
- 3 To pass and approve the list of courses offered as Open Elective Course-R2022 by Aero Dept. to other departments.
- 4 To pass and approve the Curriculum for the Regulation 2024
- 5 To pass and approve the Syllabus for courses offered by the Department from 1st to 4th semester of Regulation 2024
- 6 Any other matters

Minutes of the meeting:

- The meeting started with a welcome address by the Head of the Department Dr. K P Dhanabalakrishnan. He extended warm welcome to all the members.

- The syllabi for the Professional Core Courses offered in 7th and 8th semesters under Regulation 2022 were presented by the Head of the Department.

VII semester		VIII semester	
Course code	Course name	Course code	Course name
22AE420	UAV SYSTEMS	22AE703	PROJECT WORK
22AE421	STRUCTURAL AND FLOW SIMULATION LABORATORY		
22AE422	AIRFRAME REPAIR LABORATORY		

- Followed by the list of Open Elective Courses offered by the Aeronautical Department were presented.
- Subsequently, the Curriculum for the Regulation 2024 and the respective Syllabi for the courses offered by the Department up to 4th semester were also presented and discussed with members of the board.
- The following feedback and suggestions were given by the members of Board of Studies.

Suggestions with regard to Syllabi of 7th and 8th semesters courses and Open elective courses – Regulation 2022

Suggestions from the Subject expert: **Dr. S Nadaraja Pillai**

- ◇ Suggested to include the year of publication for text book 1 prescribed in the syllabus of the course UAV SYSTEMS.

Suggestions from the Subject expert: **Dr. S Venkatachalam**

- ◇ Suggested to include experiments on Structural analysis of bars and beams in STRUCTURAL AND FLOW SIMULATION LABORATORY
- ◇ Mentioned that the Open Elective Course - EXPERIMENTAL STRESS ANALYSIS will be little heavy for other department students. Therefore, suggested to offer an alternate course.

Suggestions from the Industry expert: **Mr. E Baluchamy**

- ◇ Suggested to include simulation of 1D, 2D and 3D flows in STRUCTURAL AND FLOW SIMULATION LABORATORY

Suggestions with regard to Curriculum and Syllabi – Regulation 2024

Suggestions from the Subject expert: Dr. K M Parammasivam

- ◇ Mentioned that almost all the courses offered in V semester are analytical in nature hence more load for the students. Suggested to interchange FLIGHT DYNAMICS of V sem with AVIONICS of VI sem.
- ◇ Expressed that the term Jet engine need not be repeatedly mentioned in the title of the units in the course PROPULSION – I offered in 4th semester.
- ◇ Suggested to offer the courses AIRCRAFT SYSTEMS AND INSTRUMENTS and AIRCRAFT SYSTEMS LABORATORY in the same semester.
- ◇ Suggested to change the Experiment - Design and modeling of and welded joints in COMPUTER AIDED AIRCRAFT COMPONENT DRAWING

Suggestions from the Subject expert: Dr. S Venkatachalam

- ◇ Mentioned that 3 lecture hours are allotted for the 1 credit course 24MC802 TAMILS AND TECHNOLOGY. Told to verify lecture hours and credits.
- ◇ Suggested to include the topic Water jet cutting in the course AIRCRAFT PRODUCTION TECHNOLOGY.
- ◇ Suggested to change the title of unit 5 of AIRCRAFT STRUCTURES – I such that it suits the content of the unit.
- ◇ Suggested to use Systems instead of System in the title of unit 4 of the course AIRCRAFT SYSTEMS AND INSTRUMENTS.

Comments from the Alumnus member: Mr. K Mukesh

- ◇ Endorsed the suggestions given by the other experts of the board.

Discussion of other matter – Feedback from Faculty members, Students, Alumni, Industry Experts and Parents.

Faculty members emphasized strengthening core engineering fundamentals while updating the curriculum with emerging technologies.

Students expressed the need for increased hands-on learning, advanced laboratories, industry-relevant software tools, and project-based learning.

Alumni recommended stronger focus on design, analysis, UAV systems, modelling, simulation, and exposure to sustainability-driven engineering practices.

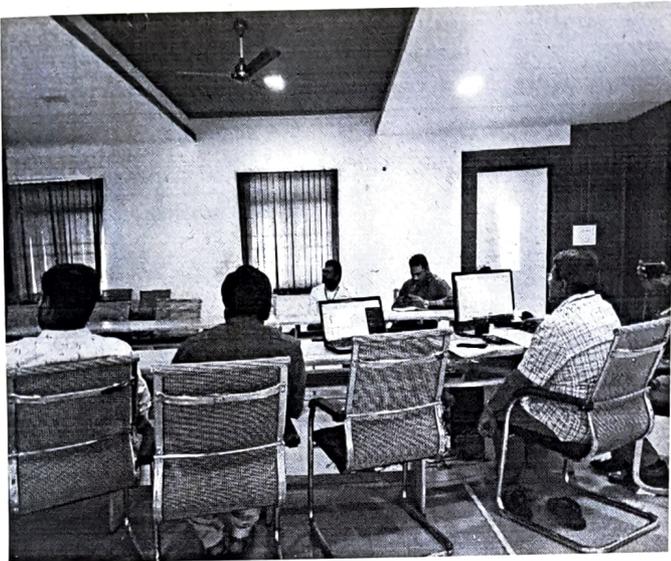
Industry experts strongly recommended curriculum alignment with current industry standards and practices, inclusion of emerging aerospace technologies, mandatory internships.

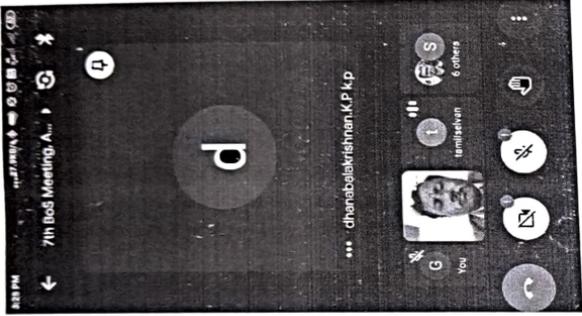
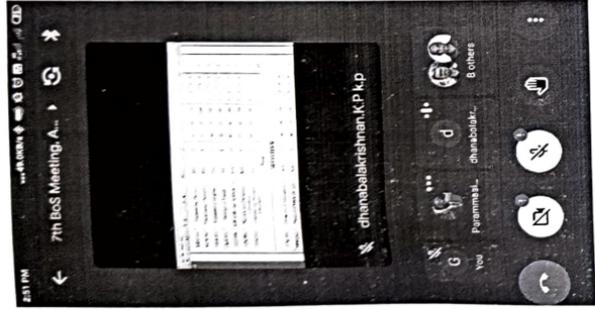
After thorough discussion, the Board of Studies unanimously resolved the following:

- ✓ To introduce new courses on Emerging Technologies relevant to the discipline, addressing current and future industry needs.
- ✓ To include a dedicated course on Design Thinking, focusing on innovation, problem-solving, and multidisciplinary engineering design.
- ✓ To establish an Aero Modelling Laboratory to strengthen hands-on skills in aircraft/UAV modelling, fabrication, and testing.

- ✓ To integrate topics related to Sustainability, including green technologies, sustainable design practices, and environmental considerations, across appropriate courses.
 - ✓ To upgrade the course on Unmanned Aerial Vehicles (UAVs) from elective to a Core Course, considering its growing importance in industry, research, and societal applications.
 - ✓ To revise Course Outcomes (COs) and map them clearly with Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) in line with Outcome-Based Education (OBE).
- The meeting was concluded with vote of thanks by the Head of the Department Dr. K P Dhanabalakrishnan.

PHOTOGRAPHS:





K.P. Dhanabalakrishnan
 Chairman – BoS / Aeronautical Engg.
 18/3/24

[Signature]
 Principal
 18/3/24

Department of Aeronautical Engineering

Date: 18.03.2024

Action taken report of Seventh Board of Studies Meeting

S.No.	Suggestions given by BoS members	Action taken	Justifications
1	Suggested to include the year of publication for text book 1 prescribed in the syllabus of the course UAV SYSTEMS.	The year of publication of latest edition is mentioned for the text book.	Students will learn about new topics and updates in the latest edition
2	Suggested to include experiments on Structural analysis of bars and beams in STRUCTURAL AND FLOW SIMULATION LABORATORY	Experiment included: Static stress analysis of axial bar and beam.	Students will have the foundation of stress analysis of simple structural members.
3	Mentioned that the Open Elective Course - EXPERIMENTAL STRESS ANALYSIS will be little heavy for other department students. Therefore, suggested to offer an alternate course.	Aircraft Materials is offered instead of Experimental Stress Analysis	The course Aircraft Materials is simpler and a beginner level course so that the other branch students can learn without any prerequisite.
4	Suggested to include simulation of 1D, 2D and 3D flows in STRUCTURAL AND FLOW SIMULATION LABORATORY	Flow simulation experiments given in the syllabus are all 2D flows.	3D flow simulation requires more time. Students are insisted to do 3D flow simulation in their project work.
5	Mentioned that almost all the courses offered in V semester are analytical in nature hence more load for the students. Suggested to interchange FLIGHT DYNAMICS of V sem with AVIONICS of VI sem.	Avionics is offered in V semester and Flight Dynamics in VI semester.	This will ease the load on students in V semester.
6	Expressed that the name Jet engine need not be repeatedly mentioned in the title of the units in the course PROPULSION – I offered in 4th semester.	Repetition of the name jet engine is avoided.	The name jet engine is mentioned in the course objectives. Therefore, it is removed from the unit titles.
7	Suggested to offer the courses AIRCRAFT SYSTEMS AND	Aircraft Systems and Instruments is	Will help students to understand easily



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Valley Campus, Pollachi Main Road, Coimbatore 641 032.

S.No.	Suggestions given by BoS members	Action taken	Justifications
	INSTRUMENTS and AIRCRAFT SYSTEMS LABORATORY in the same semester.	offered as Integrated Theory Practical Course in 4 th semester	and demonstrate the functions of different systems that is learnt in theory.
8	Suggested to change the Experiment - Design and modeling of and welded joints in COMPUTER AIDED AIRCRAFT COMPONENT DRAWING	Removed the experiment - Design and modeling of and welded joints. Replaced with Design and modeling of riveted joints.	Riveted joints are more relevant to airframe.
9	Suggested to include the topic Water jet machining in the course AIRCRAFT PRODUCTION TECHNOLOGY.	The topic Water jet machining is added in unit-4.	The students will have the exposure to a new machining process.
10	Suggested to change the title of unit 5 of AIRCRAFT STRUCTURES – I such that it suits the content of the unit.	The unit title is changed as Fatigue, Thermal and Impact Stresses.	The titled is renamed such that it suits the content.
11	Suggested to use Systems instead of System in the title of unit 4 of the course AIRCRAFT SYSTEMS AND INSTRUMENTS	Correction made	---

K. P. Shanabhai
Chairman – BoS / Aero

[Signature]
Principal



HINDUSTHAN INSTITUTE OF TECHNOLOGY
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Department of Aeronautical Engineering



Date: 12.09.2023

Minutes of 6th Board of Studies Meeting

The 6th Board of Studies (BoS) meeting was held on 08.09.2023(Friday) at 2.30 pm in virtual mode held at the Department of Aeronautical Engineering, Hindusthan Institute of Technology, Coimbatore.

The following members were present online:

S. No.	Name & Designation	Position
1	Dr. K P Dhanabalakrishnan, Professor & Head, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Chairman
2	Dr. K M Parammasivam Professor Department of Aerospace Engineering MIT Campus, Anna University, Chennai	University Nominee
3	Dr. S Nadaraja Pillai Professor Aerospace Engineering School of Mechanical Engineering, SASTRA Deemed University, Thanjavur.	Subject Expert
4	Dr. S Venkatachalam Assistant Professor School of Aerospace Engineering, Karunya Institute of Technology & Sciences (Deemed to be University) Coimbatore	Subject Expert
5	Mr. Baluchamy Eswaran Project Manager – FEA Simgrosys Consulting Service Private Ltd., Coimbatore.	Industry Expert
6	Mr. K Mukesh Ph.D.(Research Scholar) Department of Applied Mechanics IIT Madras, Chennai.	Alumnus Member

S. No.	Name & Designation	Position
7	Mr. M Moses Devaprasanna, Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member
8	Mr. M Harish Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member
9	Mr. S Tamilselvan Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member
10	Mr. N Maheswaran Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member
11	Mr. V Ganesan Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member
12	Mr. R Sakthivel Assistant Professor, Department of Aeronautical Engineering, Hindusthan Institute of Technology.	Internal member

Agenda:

- 1 Welcome Address
- 2 Presentation and Discussion of syllabi for 5th and 6th semester courses – R2022
- 3 Amendments to verticals – R2020
- 4 Inclusion of mandatory one credit Tamil course
- 5 Any other matter for discussion
- 6 Vote of Thanks

Minutes of the meeting:

- The meeting started with a welcome address by the Head of the Department Dr. K P Dhanabalakrishnan. He extended warm welcome to all the members.
- The syllabi for 5th and 6th semester courses under Regulation 2022 were presented by the faculty members of the Department. The following are the courses offered by the Department in 5th and 6th semesters.

V semester		VI semester	
Course code	Course name	Course code	Course name
22AE412	Propulsion-II	22AE416	Finite Element Methods
22AE413	Aircraft Structures-II	22AE5xx	Professional Elective- II
22AE414	Flight Dynamics	22AE417	Avionics
22AE5xx	Professional Elective- I	22AE418	Aero Modeling and Flight Simulation Laboratory
22AE702	Aircraft Design Project	22TP710	Internship - II

Verticals for the selection of Professional Elective Courses are as follows:

VERTICAL 1	VERTICAL 2	VERTICAL 3	VERTICAL 4
AERODYNAMICS	AEROSPACE PROPULSION AND SPACE MECHANICS	AIRCRAFT STRUCTURES AND MATERIALS	AIRCRAFT MAINTENANCE
Experimental Aerodynamics	Heat Transfer	Theory of Elasticity	Aircraft General Engineering and Maintenance Practices
Boundary Layer Theory	Principles of Combustion	Fatigue and Fracture	Airframe Maintenance and Repair
Industrial Aerodynamics	Design of Gas Turbine Engine Components	Vibrations and Aeroelasticity	Aero Engine Maintenance and Repair
Helicopter Aerodynamics	Cryogenic Propulsion	Experimental Stress Analysis	Helicopter Maintenance
Hypersonic Aerodynamics	Rockets and Missiles	Advanced Aerospace Materials	Aircraft Rules and Regulations
Computational Fluid Dynamics	Space Mechanics	Composite Materials and Structures	Airline and Airport Management

- The members of the board discussed the syllabi and the following feedback and suggestions given by the members of Board of Studies are recorded as follows.

Suggestions from the University Nominee: **Dr. K M Parammasivam**

- ◇ Pointed out that many essential topics are not included in the course 22AE413 Aircraft Structures-II
- ◇ Content-wise comparison between old and new syllabi of all courses is needed.
- ◇ Suggested the following change Vertical 3:
Course name to be changed as Fatigue and Fracture Mechanics

Suggestions from the Subject expert: **Dr. S Nadaraja Pillai**

- ◇ Suggested to Split the course 22AE414 Flight Dynamics into separate courses namely Aircraft Performance and Aircraft Stability and Control.
- ◇ Tutorial hours should be allotted for the course 22AE414 Flight Dynamics as it is an analytical course.
- ◇ Topic on CG calculation should be added in the practical course 22AE702 Aircraft Design Project.

Suggestions from the Subject expert: **Dr. S Venkatachalam**

- ◇ Suggested that the title of experiment 4 in 22AE413 Aircraft Structures-II should be very specific to the parameter being determined.
- ◇ Topics on Vibration Control can be included instead of Basic topics on vibration in unit 3 of Structural Dynamics course.
- ◇ Suggested to mention No of hours instead of No of periods for each course.

Comments from the Industry expert: **Mr. E Baluchamy**

- ◇ Endorsed the suggestions given by the other experts of the board.

Comments from the Alumnus member: **Mr. K Mukesh**

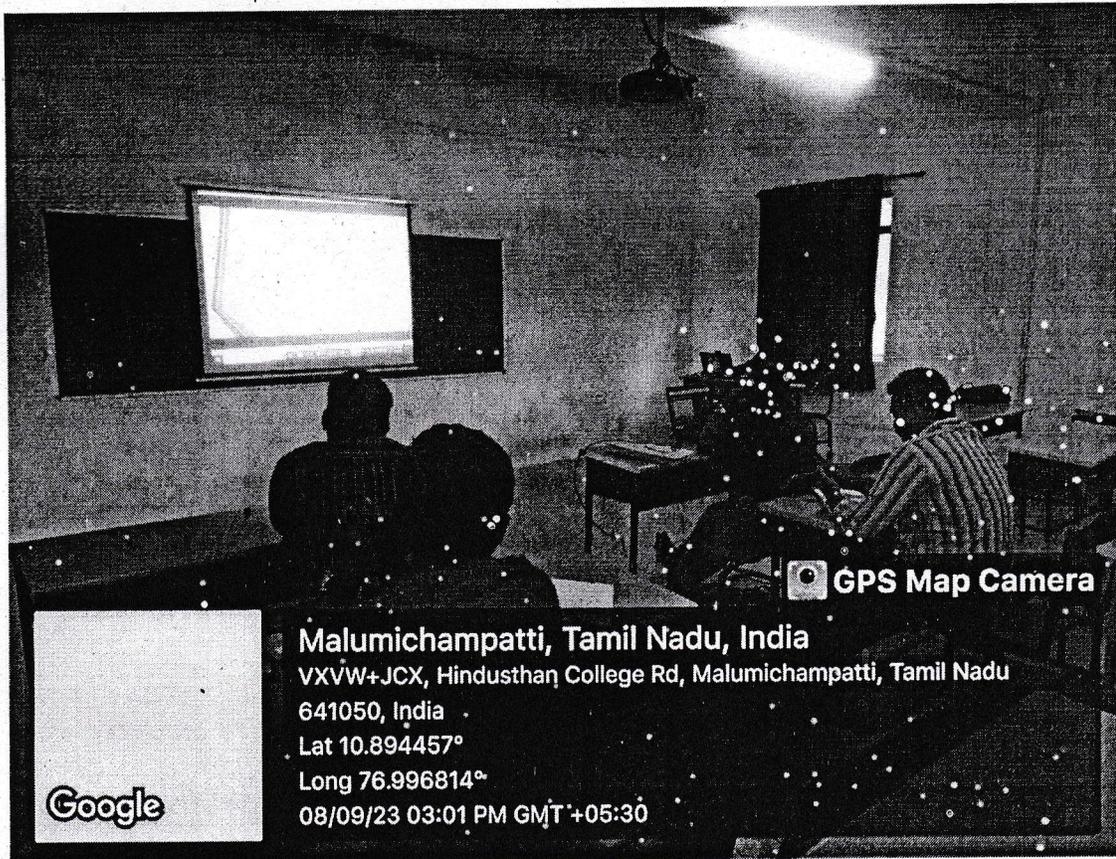
- ◇ Endorsed the suggestions given by the other experts of the board.
- Proposed to make the following amendments to the Verticals of Regulation 2020 and were accepted.

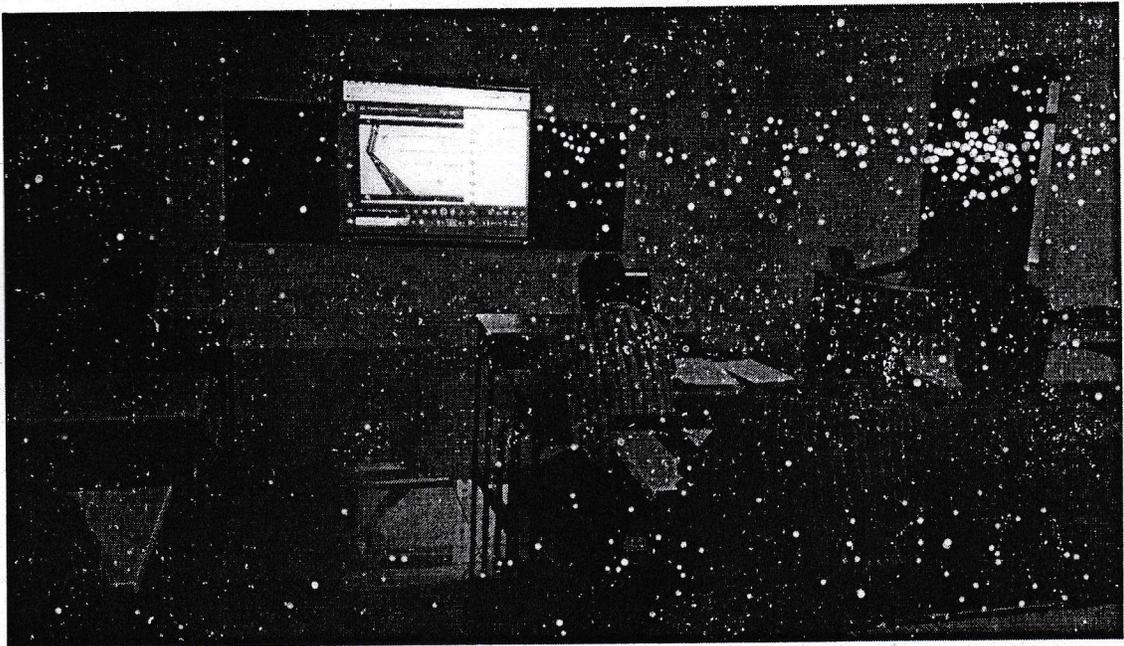
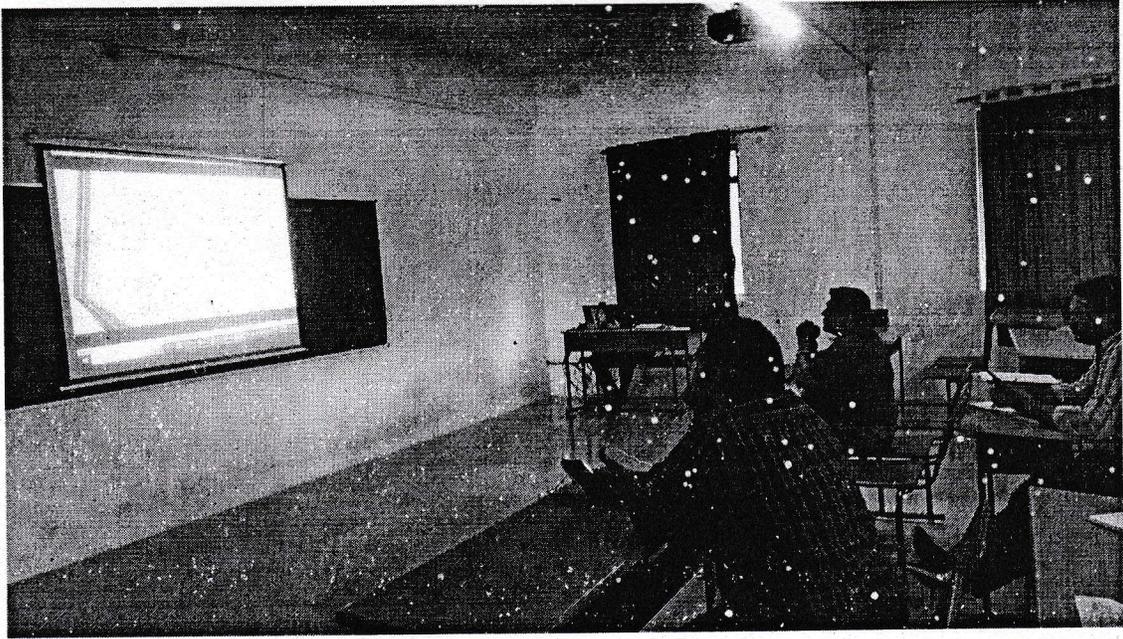
VERTICAL 1	
AERODYNAMICS	
Offered before amendment	Offered after amendment
Computational Fluid Dynamics	Wind Engineering
VERTICAL 3	
AIRCRAFT STRUCTURES AND MATERIALS	

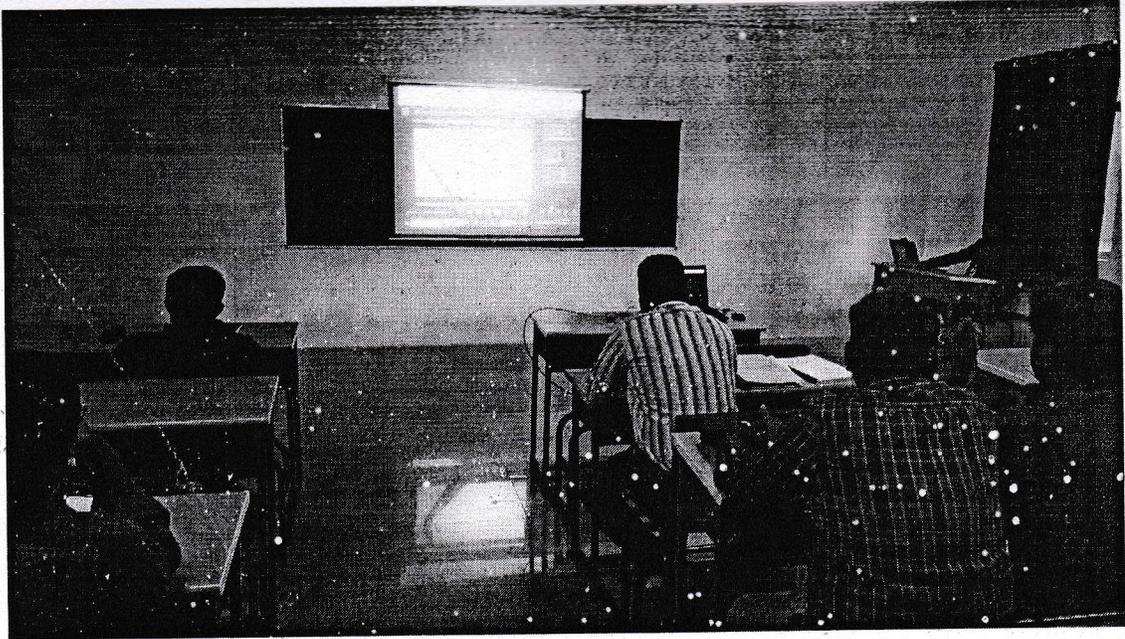
Offered before amendment	Offered after amendment
Vibration and Aeroelasticity	Structural Dynamics
Composite Materials and Structures	Introduction to Nano Composites

- As per the guidelines of Anna University, it is resolved to include the mandatory one credit Tamil courses in the curriculum of R2022 (2022 admitted batch) and R2022a (batches admitted from 2023 onwards)
- For the 1 credit Employability Enhancement Course 22AE701 Advancements and Career Prospects in Aeronautics offered in 3rd semester, R2022, it is resolved to do the evaluation in internal mode based on the following criteria: Quiz, Assignment / Poster presentation and Case study.
- The meeting was concluded with vote of thanks by Mr. M Moses Devaprasanna.

PHOTOGRAPHS:







K.P. Shanabhat
Chairman - BoS / Aeronautical Engg.
12/9/23

CME
Principal
12.09.2023

Department of Aeronautical Engineering

Date: 14.09.2023

Action taken report of Sixth Board of Studies Meeting

S.No.	Suggestions given by BoS members	Action taken	Justifications
1	Pointed out that many essential topics are not included in the course 22AE413 Aircraft Structures-II	22AE413 Aircraft Structures-II was a Theory integrated practical course. Now it is divided into two courses: Theory and Practical courses separately offered in 5 th semester	The change will enable students to learn elaborately about Buckling of plates and Aircraft stress analysis
2	Content-wise comparison between old and new syllabi of all courses is needed.	Content-wise comparison such as topics added or removed along with justification is prepared.	Enables to find the percentage change in content and the relevance of topics with course outcomes.
3	Suggested the following change in Vertical 3: Course name to be changed as Fatigue and Fracture Mechanics	The course name is changed as Fatigue and fracture mechanics	Course name has been changed suitably reflecting the content of the course
4	Suggested to Split the course 22AE414 Flight Dynamics into separate courses namely Aircraft Performance and Aircraft Stability and Control.	There is no room to include an extra course in 5 th or 6 th semesters.	In each 5 th and 6 th semesters, already there are 7 theory courses including MC and 2 practical courses. Therefore, it is unable to split the course Flight Dynamics into two courses.
5	Tutorial hours should be allotted for the course 22AE414 Flight Dynamics as it is an analytical course.	One tutorial period is allotted and the credit of the course 22AE414 Flight Dynamics is increased to 4.	Addition of tutorial hours helps students to work our numerical problems and improve their analytical skills.

S.No.	Suggestions given by BoS members	Action taken	Justifications
6	Topic on CG calculation should be added in the practical course 22AE702 Aircraft Design Project.	Topic: Centre of gravity calculation included in Experiment No: 3	Centre of gravity calculation significantly improves the stability and safety aspects in Aircraft design.
7	Suggested that the title of Experiment No: 4 in 22AE413 Aircraft Structures-II should be very specific to the parameter being determined.	Title has been ^{changed} as Determination of Tensile Properties for a Composite Specimen.	Students can easily remember and relate the properties determined to the experiment title.
8	Topics on Vibration Control can be included instead of Basic topics on vibration in unit 3 of Structural Dynamics course.	Topic: Methods of vibration control is added in unit 3	Students' domain knowledge is enhanced by introduction of new topics.
9	Suggested to mention No of hours instead of No of periods for each course.	Retained the term No of periods	The term No of periods is commonly followed in the syllabi of all branches.
10	For the 1 credit Employability Enhancement Course 22AE701 Advancements and Career Prospects in Aeronautics offered in 3rd semester, R2022, it is resolved to do the evaluation in internal mode based on the following criteria: Quiz, Assignment / Poster presentation and Case study.		

K.P. Shanmugam
Chairman - BoS / Aero
19/9/23

Principal