

ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai DR.M.G.R.NAGAR,HOSUR-635130

BOARD OF STUDIES IN FACULTY OF AERONAUTICAL ENGINEERING

MINUTES OF THE 15th MEETING

DATE: 08/11/2017

The 15th Board of Studies Meeting of Aeronautical Engineering held on 08/11/2017 at 11:00 AM.

S.NO	Name	Category
1.	Dr.J.Arivudainambi	Chairman
2.	Dr.K.M.Paramasivam	University Nominee
3.	Dr.Sarat Kumar Maharana	Academic Council Nominee
4.	Dr.V.Senthilkumar	Academic Council Nominee
5.	Dr.K.T.Varughese	Industrial Expert
6.	Mr.R.Ashok Mitran	Representative From Alumini
7.	Dr.Channankiah	Inter Disciplinary Expert
8.	Mr.P.Muthusamy	Faculty Representative
9.	Mr.T.Anand	Faculty Representative

MEMBERS PRESENT

15.1 To consider the minutes of 14th meeting of the Board of Studies in Aeronautical Engineering held on 18/04/2017.

RESOLVED that the minutes of 14th Board of Studies Meeting in Aeronautical Engineering have been considered.

15.2 To consider the Curriculum & Syllabi of IV Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2016-2017 (Annexure I)

RESOLVED that the Curriculum & Syllabi of **IV** Semester B.E Aeronautical Engineering under **Regulation 2015 (CBCS)** for the batch of students admitted in the year of 2016-2017 be approved. (Annexure I)

15.3 To consider the Syllabi of VI Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2015-2016 (Annexure II) **RESOLVED** that the Syllabi of **VI** Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2015-2016 be approved. (Annexure II)

15.4 To consider the Syllabi of VIII Semester B.E, Aeronautical Engineering under Regulation 2011 for the batch of students admitted in the year of 2014-2015. (Annexure III)

RESOLVED that the Syllabi of VII Semester B.E, Aeronautical Engineering under Regulation 2011 for the batch of students admitted in the year of 2014-2015 be approved. (Annexure III)

DATE: 08/11/2017

CHAIRMAN BOARD OF STUDIES

Chairman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu.

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ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS)

Affiliated to Anna University, Chennai

Dr.M.G.R.Nagar, Hosur-635130

15th BOARD OF STUDIES

FACULTY OF AERONAUTICAL ENGINEERING- 15th MEETING ON 18/11/2017 @ 11:00 AM

15.5 New courses introduced/newly added topics in corresponding courses in the year of 2017

Sl.No	Semester	Subject Code	Subject Name	Remarks
				The existing syllabus has been entirely reframed with the following unit modules
1.	IV	415AEE08	Introduction To Space Technology	 Orbital Mechanics Orbits In Three Dimensions Orbital Maneuver Rocket Motion In Free Space And Gravitational Field Ballistic Missile Trajectories
2.	IV	415AET02	Aerodynamics-1	NEWLY ADDED TOPICS UNIT 4 ; Airfoil and wing theory 1. Vortex line 2. Horse shoe vortex 3. Biot and savart law 4. Lifting line theory and its limitation 5. Joukowski 6. Karman - Trefftz
3.	IV	415AEE09	Experimental Aerodynamic	 Wind Tunnel Testing Experiments in Subsonic Wind Tunnel Experiment in high Speed Tunnel Measurement Techniques Aircraft Structural Problems
4.	IV	415AEP10	CATIA V5 R 21 Laboratory	 Scaling, rotation, translation, editing, dimensionin g-Typical CAD command Structure Wire Frame Modeling-Surface modeling Solid Modeling Advanced modeling CFD/FEM Fundamentals Part Design of an Aircraft Components Tool Design of an Aircraft Components Surface Design of Aircraft Components
5.	IV	415AEP11	Production Technology Laboratory	 Lathe Shaper and Slotter Drilling Milling Grinding

6.	VI	615AET02	Heat Transfer	NEWLY ADDED TOPICS UNIT 3; Radiative Heat Transfer 1. Introduction to physical mechanism 2. Radiation properties 3. Radiation shape factors 4. Heat exchange between non-black bodies
7.	VI	615AEE08	Boundary Layer Theory	 5. Radiation shields 1. Navigation 2. Guidance 3. Aircraft Controls 4. Control techniques of Rockets And Missiles 5. Control Of spacecraft
8.	VI	615MEO0 1	Applied Hydraulics and pneumatics	 Fluid Power Principles And Fundamentals Hydraulic System And Components Control Components, Accessories Of Hydraulic system Pneumatic Systems And Components Hydraulic And Pneumatic Circuits and Troubleshooting
9.	VI	615AEE12	Structural Dynamics	 Force deflection properties of structures Principles of dynamics Natural modes of vibration Energy methods Approximate methods
10.	VI	615AEP10	Aircraft interior design Laboratory	 aircraft sitting designing arrangement (general class)(2d) aircraft sitting designing arrangement (business class)(2d) Aircraft simgle aisle design(2d) Aircraft twin aisle design(2d) Aircraft seat design(3d business class) Aircraft seat design(3d first class) Aircraft Design of laptop tray sizing of seats and civil aircraft Design of wind wind for civil aircraft Design of wind shield for fighter aircraft Design of wind shield for passenger aircraft
11.	VIII	811AEE43	Structural Dynamics	NEWLY ADDED TOPICS UNIT 2 1. Time domain analysis 2. Finite difference method 3. Frequency domain analysis 4. Basic methodology 5. Dynamic response function
12	VIII	811AEE04	Entrepreneurship development, management And IPR	 introduction of entrepreneurship Entrepreneurial development agencies Project management Introduction to intellectual priority Patent rights
13	VIII	811AEE06	Human Values And Professional Ethics	 Human values Engineering ethics Engineering as social experimentation Safety - responsibilities and right Global issues

4	VIII	811AEE09	Air transportation and Aircraft Maintenance Management	 Introduction Airline economic Aircraft reliability Principle of airline scheduling Technology in aircraft maintenance
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Feedback obtained about curriculum and syllabus from stakeholders (Faculty, Students, Alumni and Employers) also discussed and concluded.

Date: 18/11/2017

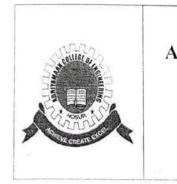
Chartening Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu.



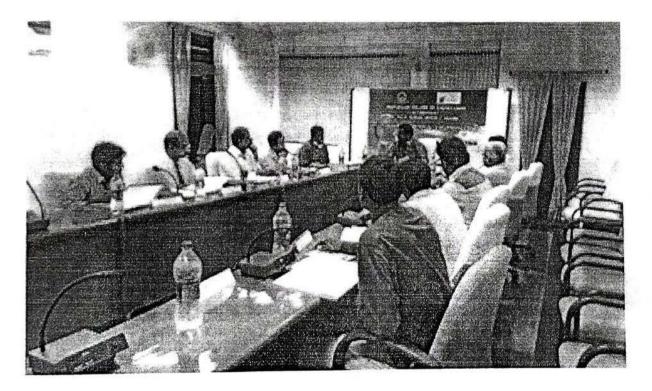
ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai DEPARTMENT OF AERONAUTICAL ENGINEERING DR.M.G.R.NAGAR,HOSUR-635109

15 BOARD OF STUDIES MEETING IN FACULTY IN AERONAUTICAL ENGINEERING ATTENDANCE DETAILS

			Date:	20-44-2017
l.No	Name	Designation & Address	Category	Signature
1.	Dr.J.Arivudainambi	Professor & Head Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109	Chairman	spit
2.	Dr.K.M.Parammasivam	Professor Department of Aerospace Engineering MIT Campus, Anna University, Chennai-600044	University Nominee	< Absent.
3.	Dr. Sarat KumarMaharana	Professor, Dean R&D Department of Aeronautical Engineering Acharya Institute of Technology, Bangalore-560107	Academic Council	A
4.	Dr.V.Senthil Kumar	Associate Professor Department of Production Engineering. NIT Trichy, Tamil Nadu-620015	Nominee	Amthe o
5.	Dr.K.T.Varughes&	Polymer Scientist Central Power Research Institute, Sadhasiva Nagar, Bangalore- 560080	Industrial Expert	for det
6.	Mr.R.AshokMithran	Business Executive Taneja Aerospace Aviation Ltd, Belagondapalli Village, Thally Road, Denkanikotta-Taluk, Krishnagiri District	Representative From Alumni	Analaista
7.	Dr.Channankaiah	Professor & Head Department of Mechanical Engineering Adhiyamaan College of Engineering Hosur-635109	Inter Disciplinary Expert	Juope
8. 9.	Mr.P.Muthusamy	Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109	Faculty Representative	P.F.
	Mr.T.Anand	Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109	Faculty Representative	4-Absent
10.	Ms.R.Priyanka	Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering	Faculty Representative	D. gricke



ADHIYAMAAN COLLEGE OF ENGINEERING (AUTONOMOUS) Affiliated to Anna University, Chennai Dr.M.G.R.Nagar, Hosur-635130



Members in Clock wise Direction:

Mr.P.Muthusamy, Dr.Channankiah, Dr.A.Siddharthan, Dr.V.Senthilkumar, Ms.M.S.Deepika Kumar(GBM), Dr.J.Arivudainambi, Ms.M.Sharadha, Mr.T.Anand



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai Dr.M.G.R.Nagar, Hosur-635109

BOARD OF STUDIES IN FACULTY OF AERONAUTICAL ENGINEERING

MINUTES OF THE 16th MEETING

DATE: 27/04/2018

The 16th Board of Studies Meeting of Aeronautical Engineering held on 27/04/2018 at 11:00 AM.

S.NO	Name	Category
1.	Dr.J.Arivudainambi	Chairman
2.	Dr.Sarat Kumar Maharana	Academic Council Nominee
3.	Dr.V.Senthilkumar	Academic Council Nominee
4.	Dr.K.T.Varughese	Industrial Expert
5.	Mr.R.Ashok Mitran	Representative From Alumini
6. Dr.Channankiah		Inter Disciplinary Expert
7. Mr.P.Muthusamy		Faculty Representative
8.	Ms.R.Priyanka	Faculty Representative

MEMBERS PRESENT

16.1 To consider the minutes of 15th meeting of the Board of Studies in Aeronautical Engineering held on 08/11/2017.

RESOLVED that the minutes of 15th Board of Studies Meeting in Aeronautical Engineering have been considered.

16.2 To consider the Curriculum & Syllabi of III Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2017-2018 (Annexure I)

RESOLVED that the Curriculum & Syllabi of **III** Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2017-2018 be approved. (Annexure I)

16.3 To consider the Curriculum & Syllabi of V Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2016-2017(Annexure II)

RESOLVED that the Curriculum & Syllabi of V Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2016-2017 be approved. (Annexure II)

16.4 To consider the Curriculum & Syllabi of VII Semester B.E, Aeronautical Engineering under Regulation 2015 for the batch of students admitted in the year of 2015-2016. (Annexure III)

RESOLVED that the Curriculum & Syllabi of VII Semester B.E, Aeronautical Engineering under Regulation 2015 for the batch of students admitted in the year of 2015-2016 be approved. (Annexure III)

DATE: 27/04/2018

CHAIRMAN BOARD OF STUDIES Chairman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Actonomous) Hosur-635 109, Tamil Nadu.



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS)

Affiliated to Anna University, Chennai

Dr.M.G.R.Nagar, Hosur-635130

16th BOARD OF STUDIES

FACULTY OF AERONAUTICAL ENGINEERING- 16th MEETING ON 27/04/2018 @ 11:00 AM

16.5 New courses introduced/newly added topics in corresponding courses in the year of 2018

Sl.No	Semester	Subject Code	Subject Name	Remarks
		The e with		The existing syllabus has been entirely reframed with the following unit modules
1	III	315AET05	Solid mechanics	NEWLY ADDED TOPICS UNIT 4; Torsion and springs 1. Pure torsion 2. Torsion of circular shafts
				 Shear stresses and twist in solid Hollow circular shaft Closely coiled helical spring Area moment method
2	111	315AEE07	Airline Operations and managements	 Area moment method Introduction Airport management Air transport service Airline operation Logistic and cargo management
3	111	315AEE08	Pollution control in aircraft industries	 Source and effect of air pollution Dispersion of pollution Air pollution control Air quality management Noise pollution
4	Ш	315AEE09	Environmental Safety managements	 Air pollution Environmental management standards Environmental measures and control Preventive environmental management system Environmental management system
5	III	315AEP11	Aero Modeling Laboratory	 Construction of paper glider Design and construction of glider Design and Construction of water rocketry Design and fabrication of aerofoil and control surface Design and fabrication of fuselage Study about electronic equipments used in UAV's Assembly of UAV electronic equipments used in UAV's Final assembly of UAV Testing and flying of UAV

6	VII	715AEE06	Helicopter Aerodynamics	 Introduction to rotating wing concert Hovering flight dynamics Forward flight dynamics Climb and descent performance Ground effect missions
7	VII	715AEE07	Thermal stress analysis	Newly added topics UNIT 1 Creep 1. Factors influencing functional life of components 2. Creep curve 3. Ductile and brittle material 4. Monk man-Grant relationship
8	VII	715AEE08	Airworthiness and certification	 Airworthiness and certification Airworthiness and procedure Health and usage monitoring Aircraft maintenance Flight evaluation
9	VII	715MEO02	Non-Destructive Testing and Materials	 Introduction and visual inspection techniques Liquid penetrate testing and magnetic particle testing Eddy current testing and acoustic emission testing
				4. Ultrasonic testing5. Radiography, comparison and selection of NDT method
10	VII	715AEE14	Industrial engineering and managements	 Introduction Work Study, Incentives, Health and safety Motivation and Behavior Management and Behavioral Approach Process Management
11	VII	715AEP11	Autonomous UAV Laboratory	 Study of list generation method Analysis of LOS/BLOS Study of electric systems Study of ethical implication Study of unmanned Aerial system Propulsion Analysis of Sensing / Surveillance Study of internal combustion engines Analysis of on-board flight control Study of turbine engine Building a working model of UAV flight
12	v	515AET02	Aircraft performance	NEWLY ADDED TOPICS UNIT 2; Steady flight 1. Steady level fight 2. Thrust /power 3. Available and required with altitude 4. Estimation of maximum level flight speed 5. Maximum range and glide 6. High lift devices
13	V	515AEE09	Space flight mechanics	 Basic concepts The General N-Body problem Satellite injection and satellite orbit perturbation Interplanetary Trajectories Ballistic missile Trajectories and materials

14	V	515AEE11	Unmanned Aircraft System	 Introduction to Unmanned aerial System Basic Aerodynamic of unmanned aerial system Design consideration of unmanned aerial system Stability and control Propulsion and surrivellance
15	V	515AEE13	Fundamentals of Flight	 Introduction to principles of flight Introduction to airplane structures & materials Power Plant used in Airplanes & Spacecrafts Aircraft Systems Basics of aerodynamics
16	V	515AEP12	Hypermesh laboratory	 Two dimension model meshing a. Mesh the given circular plate with hole. b. Mesh the given I section, L section, T section. c. Mesh the given plate with a hole and hexagon d. Mesh the given plate with a hole, Hexagon and ellipse Three dimension meshing a. Mesh the given clip repair model b. Mesh the given Aircraft model d. Mesh the given Bracket model with riveting

Feedback obtained about curriculum and syllabus from stakeholders (Faculty, Students, Alumni and Employers) also discussed and concluded.

Date: 27/04/2018

Chairman Board of Studies Chairman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu.

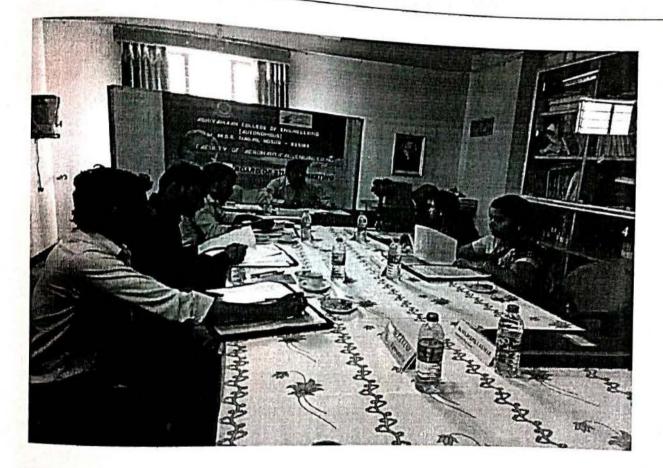


ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai DEPARTMENT OF AERONAUTICAL ENGINEERING DR.M.G.R.NAGAR,HOSUR-635109

16th BOARD OF STUDIES MEETING IN FACULTY IN AERONAUTICAL ENGINEERING ATTENDANCE DETAILS Date: 27-04-2018

SI.No	Name	Designation & Address	Category	Signature	
1.	. Dr.J.Arivudainambi	Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109		spe	
2.	Dr.K.M.Parammasivam	 Professor Department of Aerospace Engineering MIT Campus. Anna University, Chennai-600044 	University Nomine	e < Absen	
3.	Dr. Sarat KumarMaharana	Professor, Dean R&D Department of Aeronautical Engineering Acharya Institute of Technology, Bangalore-560107	Academic Council	7	
4.	Dr.V.Senthil Kumar	Associate Professor Department of Production Engineering. NIT Trichy, Tamil Nadu-620015	Nominee	Amthe 2	
5.	Dr.K.T.Varughes&	Polymer Scientist Central Power Research Institute, Sadhasiva Nagar, Bangalore- 560080	Industrial Expert	fort i chy	
6.	Mr.R.AshokMithran	Business Executive Taneja Aerospace Aviation Ltd, Belagondapalli Village, Thally Road, Denkanikotta-Taluk, Krishnagiri District	Representative From Alumni	Analaite	
7.	Dr.Channankaiah	Professor & Head Department of Mechanical Engineering Adhiyamaan College of Engineering Hosur-635109	Inter Disciplinary Expert	Prove	
8. Mr.P.Muthusamy		Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109	Faculty Representative	P.F.	
		Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109	Faculty Representative	4-Absent	
10. N		Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering	Faculty Representative	B. Opinte	

ADHIYAMAAN COLLEGE OF ENGINEERING (AUTONOMOUS) Affiliated to Anna University, Chennai Dr.M.G.R.Nagar, Hosur-635130



Members in Clock wise Direction:

Mr.P.Muthusamy, Dr.Channankiah, Dr.A.Siddharthan, Dr.V.Senthilkumar, Ms.M.S.DeepikaKumar (GBM), Dr.J.Arivudainambi, Ms.M.Sharadha, Mr.T.Anand, Ms.R.Priyanka



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai Dr.M.G.R.Nagar, Hosur-635130

17th BOARD OF STUDIES MEETING IN FACULTY OF AERONAUTICAL ENGINEERING

MINUTES OF THE 17th MEETING

Date: 01/11/2018

The 17th Board of Studies Meeting of Aeronautical Engineering held on 01/11/2018 at 12:30 PM.

Sl.No	Name	Category
1	Dr.J.Arivudainambi	Chairman
2	Dr.A.Siddharthan	
3	Dr.V.Senthilkumar	Academic Council Nominee
4	Ms.M.Sharadha	Industrial Expert
5	Ms.M.S.Deepika Kumar (GBM)	Representative From Alumni
6	Dr.Channankiah	Inter Disciplinary Expert
7	Mr.P.Muthusamy	Faculty Representative
8 Mr.T.Anand		Faculty Representative
9 Ms.R.Priyanka		Faculty Representative

MEMBERS PRESENT

17.1 To consider the minutes of 16th meeting of the Board of Studies Meeting in Aeronautical Engineering held on 27/04/2018.

RESOLVED that the minutes of 16th Board of Studies Meeting in Aeronautical Engineering have been considered.

17.2 To consider the Syllabi of VIII Semester B.E Aeronautical Engineering under Regulation 2015 for the batch of students admitted in the year of 2015-2016. (Annexure I)

RESOLVED that the Syllabi of **VIII Semester** B.E Aeronautical Engineering under Regulation 2015 for the batch of students admitted in the year of 2015-2016 be approved. (Annexure I)

17.3 To consider the Syllabi of VI Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2016-2017. (Annexure II)

RESOLVED that the Syllabi of VI Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2016-2017 be approved. (Annexure II)

17.4 To consider the Syllabi of IV Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2017-2018. (Annexure III)

RESOLVED that the Syllabi of **IV** Semester B.E Aeronautical Engineering under **Regulation 2015 (CBCS)** for the batch of students admitted in the year of 2017-2018 be approved. (Annexure III)

17.5 Any others

17.5.1 As per the suggestion given by the Board Members, changes are made in the following Professional Elective subjects in VIII Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted during the period 2015-2016.

Newly added topics:

Rocket and missile (815AEE01):

Unit - IV Staging and Controlling of Rockets and Missiles. Topics included : Guided missile systems : Rocket Stage Separation Techniques

Computer Integrated Manufacturing (815AEE07): Unit - IV Flexible Manufacturing System and Vehicle Guidance. Topics included : Automated Guided Vehicle System (AGVS) : Vehicle Guidance technology – Vehicle Management

17.5.2 Panel of Examiners:

- Dr.J.Arivudainambi / Prof & Head Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109.
- Mr.P.Muthusamy /AP Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109.
- Mr.T.Anand /AP Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109.

- Dr.K.T.Varughese Polymer Scientist, Central Power Research Institute Sadhasiva Nagar, Bangalore-560080
- Dr.K.M.Parammasivam / Prof Department of Aerospace Engineering, MIT Campus, Anna University, Chennai-600044.

Mr. P.Vinayagam /AP Department of Aeronautical Engineering Mahendra Engineering college. Namakkal Dist. Tamilnadu.

* M.M.Venugopal

Asst Professor, Department of Aeronautical Engineering MVJ College of Engineering Near ITPB, Channasandra, Bangalore-560 067

Dr.V.Senthil Kumar Associate Professor

Department of Production Engineering, NIT Trichy, Tamil Nadu-620015

Mr.Karthikeyan Associate professor Dept of Aeronautical Engineering Excel College of Engineering & Technology, Namakkal-Dist.

Dr.A.Siddharthan Associate Professor Department of Mechanical Engineering, Anna University, Chennai-600025.

Dr. Sarat Kumar Maharana Professor, Dean R&D Department of Aeronautical Engineering, Acharya Institute of Technology, Bangalore-560107.

Date: 02/11/2018

Chair

Board of Studies Chairman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu.



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai Dr.M.G.R.Nagar, Hosur-635130

17th BOARD OF STUDIES

FACULTY OF AERONAUTICAL ENGINEERING- 17th MEETING ON 01/11/2018 @ 12:30 PM

17.6 <u>New courses introduced/newly added topics</u> in corresponding courses in the year of 2018

SI.No	Semester	Subject Code	Subject Name	Remarks
				The existing syllabus has been entirely reframed with the following unit modules
1.	IV	415AEE08	Introduction To Space	 Orbital Mechanics Orbits In Three Dimensions
1	1.2		Technology	 Orbital Maneuver Rocket Motion In Free Space And Gravitational
	2.55			Field 5. Ballistic Missile Trajectories
2.	IV	415AEE06	Metal joining process	NEWLY ADDED TOPICS UNIT 4 ; material testing 1. Testing of material 2. Tensile testing 3. Compression testing 4. Hardness testing 5. Impact testing
3.	IV	415AEE09	Experimental Aerodynamic	 Wind Tunnel Tmesting Experiments in Subsonic Wind Tunnel Experiment in high Speed Tunnel Measurement Techniques Aircraft Structural Problems
4.	IV	415AEP10	CATIA V5 R 21 Laboratory	 Scaling, rotation, translation, editing, dimensionin g-Typical CAD command Structure Wire Frame Modeling-Surface modeling Solid Modeling Advanced modeling CFD/FEM Fundamentals Part Design of an Aircraft Components Tool Design of an Aircraft Components Surface Design of Aircraft Components
5.	IV	415AEP11	Production Technology Laboratory	 Lathe Shaper and Slotter Drilling Milling Grinding

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6.	VI	615AET02	Experimental	NEWLY ADDED TOPICS
			stress analysis	UNIT 2; Extensometers
				1. Mechanical
				2. Optical Acoustical and electrical extensometers
				and their uses
				3. Extensometer disadvantages and advantages
7.	VI	615AEE08	Boundary Layer	1. Navigation
			Theory	2. Guidance
				3. Aircraft Controls
				4. Control techniques of Rockets And Missiles
				5. Control Of spacecraft
8.	VI	615MEO0	Applied	1. Fluid Power Principles And Fundamentals
		1.	Hydraulics and	2. Hydraulic System And Components
			pneumatics	3. Control Components, Accessories Of Hydraulic
		1 1	phoamatico	system
1		1 1		4. Pneumatic Systems And Components
	÷ • • • •	1 1		5. Hydraulic And Pneumatic Circuits and
				Troubleshooting
9.	VI	615AEE12	Structural	1. Force deflection properties of structures
9.	VI	01JAEE12	Dynamics	2. Principles of dynamics
			Dynamics	3. Natural modes of vibration
				4. Energy methods
				5. Approximate methods
10	VI	615AEP10	Aircraft interior	
10.	VI	OISAEPIU		1. aircraft sitting designing arrangement (general
			design	class)(2d)
			Laboratory	2. aircraft sitting designing arrangement (business
	1			class)(2d)
				3. Aircraft simgle aisle design(2d)
				4. Aircraft twin aisle design(2d)
				5. Aircraft seat design(3d business class)
				6. Aircraft seat design(3d first class)
				7. Design of laptop tray sizing of seats and civil
				aircraft
				8. Design of window for civil aircraft
				9. Design of wind shield for fighter aircraft
				10. Design of wind shield for passenger aircraft
11.	VIII	815AEE43	Structural	NEWLY ADDED TOPICS
			Dynamics	UNIT 1
				1. Low speed wind tunnels
				2. estimation of energy ratio and power required
		1		3. Supersonic wind tunnel
				4. Calculation of running time
				5. storage tank requirements
12	VIII	815AEE04	Entrepreneurship	
			development,	2. Entrepreneurial development agencies
151			management	3. Project management
			And IPR	4. Introduction to intellectual priority
				5. Patent rights
13	VIII	815AEE06	Human Values	
13	VIII	01JALEU0	And Professional	1. Human values
-				D miles
		-	Ethics	3. Engineering as social experimentation
	- Start 1			 Safety - responsibilities and right Global issues

4	VIII	815AEE09	Air transportation and Aircraft Maintenance Management	 Introduction Airline economic Aircraft reliability Principle of airline scheduling Technology in aircraft maintenance
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Feedback obtained about curriculum and syllabus from stakeholders (Faculty, Students, Alumni and Employers) also discussed and concluded.

Date: 01/11/2018

Chairman Board of Avertsdies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autorumcus) Hesur-635 109, Tamil Naeu.



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai DEPARTMENT OF AERONAUTICAL ENGINEERING DR.M.G.R.NAGAR,HOSUR-635109

16th BOARD OF STUDIES MEETING IN FACULTY IN AERONAUTICAL ENGINEERING ATTENDANCE DETAILS

SI.No	Name			: 27-04-2018
1.	Dr.J.Arivudainambi	Designation & Address	Category	Signature
1.	DI S.ATVUGAMAMDI	Professor & Head Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109	Chairman	spath
2.	Dr.K.M.Parammasivam	Professor Department of Aerospace Engineering MIT Campus. Anna University, Chennai-600044	University Nominee	< Absent
3.	Dr. Sarat KumarMaharana	Professor, Dean R&D Department of Aeronautical Engineering Acharya Institute of Technology, Bangalore-560107	Academic Council	7
4.	Dr.V.Senthil Kumar	Associate Professor Department of Production Engineering. NIT Trichy, Tamil Nadu-620015	Nominee	Amthe D
5.	Dr.K.T.Varughes4	Polymer Scientist Central Power Research Institute, Sadhasiva Nagar, Bangalore- 560080	Industrial Expert	fert i der
6.	Mr.R.AshokMithran	Business Executive Taneja Aerospace Aviation Ltd, Belagondapalli Village, Thally Road, Denkanikotta-Taluk, Krishnagiri District	Representative From Alumni	Analaithe
7.	Dr.Channankaiah	Professor & Head Department of Mechanical Engineering Adhiyamaan College of Engineering Hosur-635109	Inter Disciplinary Expert	Prove
8.	Mr.P.Muthusamy	Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109	Faculty Representative	P.F.
9.	Mr.T.Anand	Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109	Faculty Representative	fAbsert
10.	Ms.R.Priyanka	Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering	Faculty Representative	R. Jriche



ADHIYAMAAN COLLEGE OF ENGINEERING (AUTONOMOUS) Affiliated to Anna University, Chennai Dr.M.G.R.Nagar, Hosur-635130



Members in Clock wise Direction:

Mr.P.Muthusamy, Dr.Channankiah, Dr.A.Siddharthan, Dr.V.Senthilkumar, Ms.M.S.DeepikaKumar (GBM), Dr.J.Arivudainambi, Ms.M.Sharadha, Mr.T.Anand



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai Dr.M.G.R.Nagar, Hosur-635130

18th BOARD OF STUDIES MEETING IN FACULTY OF AERONAUTICAL ENGINEERING

MINUTES OF THE 18th MEETING

Date: 30/04/2019

The 18th Board of Studies Meeting of Aeronautical Engineering held on 30/04/2019 at 10:30 AM.

SI.No	Name	Category
1	Dr.J.Arivudainambi	Chairman
2	Dr.A.Siddharthan	
3	Dr.V.Senthilkumar	Academic Council Nominee
4	Ms.M.Sharadha	Industrial Expert
5	Ms.M.S.Deepika Kumar (GBM)	Representative From Alumni
6	Dr.Channankiah	Inter Disciplinary Expert
7	Mr.P.Muthusamy	Faculty Representative
8	Mr.T.Anand	Faculty Representative
9	Ms.R.Priyanka	Faculty Representative

MEMBERS PRESENT

18.1 To consider the minutes of 17th meeting of the Board of Studies Meeting in Aeronautical Engineering held on 01/11/2018.

RESOLVED that the minutes of 17th Board of Studies Meeting in Aeronautical Engineering have been considered.

18.2 To consider the Syllabi of VII Semester B.E Aeronautical Engineering under Regulation 2015 for the batch of students admitted in the year of 2016-2017. (Annexure I)

RESOLVED that the Syllabi of **VII** Semester B.E Aeronautical Engineering under Regulation 2015 for the batch of students admitted in the year of 2016-2017 be approved. (Annexure I) 18.3 To consider the Syllabi of V Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2017-2018. (Annexure II)

RESOLVED that the Syllabi of V Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2017-2018 be approved. (Annexure II)

18.4 To consider the Syllabi of III Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2018-2019. (Annexure III)

RESOLVED that the Syllabi of **III** Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2018-2019 be approved. (Annexure III)

18.5 Any others

18.5.1 As per the suggestion given by the Board Members, changes are made in the following Professional Elective subjects in III Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted during the period 2018-2019.

Newly added topics:

Production Technology (318AEE05):

Unit - III Unconventional Machining. Topics included : Plasma Arc Machining

: Electrical Discharge Machining

: Water jet Machining

Unit - V Jigs & Fixtures, NDT and other Inspection Techniques. Topics included : Types of Riveted and bolted Joints

: X-Ray, Magnetic particle inspection

Newly added Subject:

Elements of Aeronautical Engineering (318AEE06)

- 18.5.2 As per the suggestion given by the Board Members, changes are made in the following One Credit Courses III, V and VII Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students.
 - <u>ATC-Air Traffic Control</u>
 - <u>NDT-Non Destructive Testing</u>
 - Product Design and Development (Catia-V5, Creo, CFD)

- 3.3 As per the suggestion given by the Board Members, changes are made in the following Certification Courses for III, V and VII Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students.
 - Aerospace Engineering
 - <u>CNC-Computer Numerical Control</u>
 - ANSYS-Product design and Analysis

5.4 Panel of Examiners:

- Dr.J.Arivudainambi / Prof & Head Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109.
- Mr.P.Muthusamy /AP Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109.

Mr.T.Anand /AP

Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109.

- Dr.K.T.Varughese Polymer Scientist, Central Power Research Institute Sadhasiva Nagar, Bangalore-560080
- Dr.K.M.Parammasivam / Prof Department of Aerospace Engineering, MIT Campus, Anna University, Chennai-600044.

Mr. P.Vinayagam /AP Department of Aeronautical Engineering Mahendra Engineering college. Namakkal Dist. Tamilnadu.

- M.M.Venugopal Asst Professor, Department of Aeronautical Engineering MVJ College of Engineering Near ITPB, Channasandra, Bangalore-560 067
- Dr.V.Senthil Kumar Associate Professor Department of Production Engineering, NIT Trichy, Tamil Nadu-620015
- Mr.Karthikeyan
 Associate professor
 Dept of Aeronautical Engineering
 Excel College of Engineering & Technology,
 Namakkal-Dist.

- Dr.A.Siddharthan Associate Professor Department of Mechanical Engineering, Anna University, Chennai-600025.
- Dr. Sarat Kumar Maharana Professor, Dean R&D Department of Aeronautical Engineering, Acharya Institute of Technology, Bangalore-560107.

Date: 30/04/2019

Chairman Board of Studies

Chairfman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Actonomous) Hosur - 635 109, Tamil Nadu.



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai

Dr.M.G.R.Nagar, Hosur-635130

18th BOARD OF STUDIES

FACULTY OF AERONAUTICAL ENGINEERING- 18th MEETING ON 30/04/2019 @ 11:00 AM

18.6 New courses introduced/newly added topics in corresponding courses in the year of 2019

SI.No	Semester	Subject Code	Subject Name	Remarks
• 1	March S.			The existing syllabus has been entirely reframed with the following unit modules
1	III	318AEE06	Elements of aeronautical engineering	NEWLY ADDED TOPICS UNIT 3; Basics of aerodynamics 1. Physical properties of structural atmosphere 2. Altitude relation 3. Newtons law applied to aeronautics 4. Evolution of lift, drag and moment 5. Airfoils 6. Mach number and maneuvers
1	m	318AEE07	Airline Operations and managements	 Introduction Airport management Air transport service Airline operation Logistic and cargo management
2	III	318AEE08	Pollution control in aircraft industries	 Source and effect of air pollution Dispersion of pollution Air pollution control Air quality management Noise pollution
3	m	318AEE09	Environmental Safety managements	 Air pollution Environmental management standards Environmental measures and control Preventive environmental management system Environmental management system
4	III	318AEP11	Aero Modeling Laboratory	 Construction of paper glider Design and construction of glider Design and Construction of water rocketry Design and fabrication of aerofoil and control surface Design and fabrication of fuselage Study about electronic equipments used in UAV's Assembly of UAV electronic equipments used in UAV's Final assembly of UAV Testing and flying of UAV Basic study about Hovercraft

	5	VII	715AET04	Vibration and Aero elasticity	NEWLY ADDED TOPICS UNIT 2; Single degree of freedom 1. Free vibration 2. Damped vibration 3. Forced vibration 4. Support excitation 5. Vibration measuring instrument
	6	VII	715AEE06	Helicopter Aerodynamics	 Introduction to rotating wing concert Hovering flight dynamics Forward flight dynamics Climb and descent performance Ground effect missions
	7	VII	715AEE08	Airworthiness and certification	 Airworthiness and certification Airworthiness and procedure Health and usage monitoring Aircraft maintenance Flight evaluation
	8	VII	715MEO02	Non-Destructive Testing and Materials	 Introduction and visual inspection techniques Liquid penetrate testing and magnetic particle testing Eddy current testing and acoustic emission testing Ultrasonic testing Radiography, comparison and selection of NDT
	9.	VII	715AEE14	Industrial engineering and managements	method 1. Introduction 2. Work Study, Incentives, Health and safety 3. Motivation and Behavior 4. Management and Behavioral Approach 5. Process Management
	10	VII	715AEP11	Autonomous UAV Laboratory	 Study of list generation method Analysis of LOS/BLOS Study of electric systems Study of ethical implication Study of unmanned Aerial system Propulsion Analysis of Sensing / Surveillance Study of internal combustion engines Analysis of on-board flight control Study of turbine engine Building a working model of UAV flight
. 1	11	V .	515AEE05	Aircraft rules and regulations	NEWLY ADDED TOPICS UNIT 4; Health and useage monitoring 1. On condition of AME Licence 2. Experience 3. Mandatory 4. Modification inspections
	12	V	515AEE09	Space flight mechanics	 Basic concepts The General N-Body problem Satellite injection and satellite orbit perturbation Interplanetary Trajectories Ballistic missile Trajectories and materials

28	VIII	818AEE04	Entrepreneurship development, management And IPR	 introduction of entrepreneurship Entrepreneurial development agencies Project management Introduction to intellectual priority Patent rights
29	VIII	818AEE06	Human Values And Professional Ethics	 Human values Engineering ethics Engineering as social experimentation Safety - responsibilities and right Global issues
30	VIII	818AEE09	Air transportation and Aircraft Maintenance Management	 Introduction Airline economic Aircraft reliability Principle of airline scheduling Technology in aircraft maintenance

Feedback obtained about curriculum and syllabus from stakeholders (Faculty, Students, Alumni and Employers) also discussed and concluded.

Date:14/10/2020

Chairman Board of Studies Chairman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamin Naou.



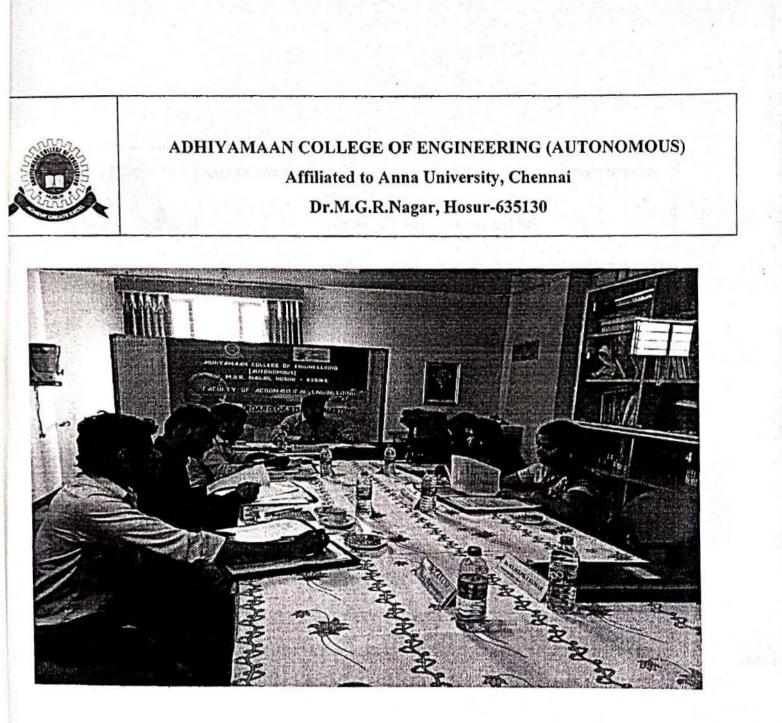
ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai DEPARTMENT OF AERONAUTICAL ENGINEERING Dr.M.G.R.NAGAR, HOSUR-635109.

18th BOARD OF STUDIES MEETING IN FACULTY IN AERONAUTICAL ENGINEERING ATTENDANCE DETAILS

-			Date	: 30-04-2019
No	Name	Designation & Address	Category	Signature
1.	Dr.J.Arivudainambi	Professor & Head Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109	Chairman	\$ fille
2.	Dr.V.Arumugam Associate Professor Department of Aerospace Engineering MIT Campus, Anna University, Chennai-600044		University Nominee	- Absent -
3.	Dr.A.Siddharthan	Assistant Professor Department of Mechanical Engineering, Anna University, Chennai-600025	Academic Council	- Absent- Dr. A.Sidlharthan
4.	Dr.V.Senthil Kumar	Associate Professor Department of Production Engineering, NIT Trichy, Tamil Nadu-620015	Nominee	Dr. A-8100 Dr. V. Sunshing
5.	Ms.M.Sharadha	Business Development Taneja Aerospace Aviation Ltd, Belagondapalli Village, Thally Road, Denkanikotta-Taluk, Krishnagiri District.	Industrial Expert	N. Saratka
6.	Ms.M.S.Deepika Kumar (GBM)	HR & Finance Manager Zing e-commerce pvt ltd, No.6, 2nd Cross, Byappanahalli Layout, Behind Swami Vivekanand Metro Station. Bangalore-560038.	Representative From Alumni	Dempiken M.S.
7.	Dr.Channankaiah	Professor & Head Department of Mechanical Engineering Adhiyamaan College of Engineering Hosur-635109.	Inter Disciplinary Expert	Summer.
8.	Mr.P.Muthusamy	Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109.	Faculty Representative	1.7. M
9.	Mr.T.Anand	Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109	Faculty Representative	5. Amonton
1	0. Ms.R.Priyanka	Assistant Professor Department of AeronauticalEngineering Adhiyamaan College of Engineering Hosur-635109	Faculty Representative	Rovite

CHAIRMAN

Chairman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu,



Members in Clock wise Direction:

Mr.P.Muthusamy, Dr.Channankiah, Dr.A.Siddharthan, Dr.V.Senthilkumar, Ms.M.S.DeepikaKumar (GBM), Dr.J.Arivudainambi, Ms.M.Sharadha, Mr.T.Anand, Ms.R.Priyanka



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai Dr.M.G.R.Nagar, Hosur-635130

19th BOARD OF STUDIES MEETING IN FACULTY OF AERONAUTICAL ENGINEERING

MINUTES OF THE 19th MEETING

Date: 05/11/2019

The 19th Board of Studies Meeting of Aeronautical Engineering held on 05/11/2019 at 10:30 AM.

SI.No	Name	Category
1	Dr.J.Arivudainambi	Chairman
2	Dr.A.Siddharthan	
3	Dr.V.Senthilkumar	Academic Council Nominee
4	Ms.M.Sharadha	Industrial Expert
5	Ms.M.S.Deepika Kumar (GBM)	Representative From Alumni
6	Dr.S.V.Suresh Babu	Inter Disciplinary Expert
7	Mr.P.Muthusamy	Faculty Representative
8	Mr.T.Anand	Faculty Representative
9	Ms.R.Priyanka	Faculty Representative

MEMBERS PRESENT

19.1 To consider the minutes of 18th meeting of the Board of Studies Meeting in Aeronautical Engineering held on 30/04/2019.

RESOLVED that the minutes of 18th Board of Studies Meeting in Aeronautical Engineering have been considered.

19.2 To consider the Syllabi of VIII Semester B.E Aeronautical Engineering under Regulation 2015 for the batch of students admitted in the year of 2016-2017. (Annexure I)

RESOLVED that the Syllabi of **VIII Semester** B.E Aeronautical Engineering under Regulation 2015 for the batch of students admitted in the year of 2016-2017 be approved (Annexure I) 19.3 To consider the Syllabi of VI Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2017-2018. (Annexure II)

RESOLVED that the Syllabi of **VI** Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2017-2018 be approved. (Annexure II)

19.4 To consider the Syllabi of IV Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2018-2019. (Annexure III)

RESOLVED that the Syllabi of IV Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2018-2019 be approved. (Annexure III)

19.5 Any others

19.5.1 As per the suggestion given by the Board Members, changes are made in the following Professional Core & Professional Elective subjects in IV Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted during the period 2018-2019.

Newly added topics:

Aerodynamics – I (418AET02):

Unit - IV Airfoil and Wing Theory

Topics included: Multi-element airfoils, Source doublet, line and horse shoe vortices.

Unit - V Viscous Flow

Topics included: Case studies (i) Application of equation of motion by Navier- stokes (ii) Parallel computation of viscous flow over wing

* Propulsion-I (418AET05):

Unit - IV Combustion Chambers

Topics included: Factors affecting combustion chamber design and their performance

Unit - IV Nozzles

Topics included: Nozzle throat conditions, Under expanded and over expanded nozzles, Thrust reversal.

19.5.2 Special Approvals

As per the suggestion given by the Board Members, changes are made in the following One Credit Courses VI and IV Semester in B.E Aeronautical Engineering under R2015 & R2018 (CBCS) for the batch of students.

One Credit Course:

- Introduced Air Traffic Control (ATC) To create more Employment opportunities for third year students, Air Traffic Control Techniques is introduced with practical Training at Taneja Aerospace and Aviation Ltd (TAAL) -Hosur.
- Introduced Product Design and Development by using (Catia-V5, Creo, CFD)-As value added course for second year students to learn, design and analysis of aircraft components for production thru experts.
- As per the suggestion given by the Board Members, changes are made in the following Certification Courses for B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students.

Certification Course:

- > Drone Technology
- CNC-Computer Numerical Control
- > ANSYS-Product design and Analysis

19.5.3 Panel of Examiners:

- Dr.J.Arivudainambi / Prof & Head Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109.
- Mr.P.Muthusamy /AP Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109.
- Mr.T.Anand /AP Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109.

- Dr.K.T.Varughese Polymer Scientist, Central Power Research Institute Sadhasiva Nagar, Bangalore-560080
- Dr.K.M.Parammasivam / Prof Department of Aerospace Engineering, MIT Campus, Anna University, Chennai-600044.
- Mr. P.Vinayagam /AP Department of Aeronautical Engineering Mahendra Engineering college. Namakkal Dist. Tamilnadu.
- M.M.Venugopal Asst Professor, Department of Aeronautical Engineering MVJ College of Engineering Near ITPB, Channasandra, Bangalore-560 067

Dr.V.Senthil Kumar Associate Professor Department of Production Engineering, NIT Trichy, Tamil Nadu-620015

- Mr.Karthikeyan Associate professor Dept of Aeronautical Engineering Excel College of Engineering & Technology, Namakkal-Dist.
- Dr.A.Siddharthan Associate Professor Department of Mechanical Engineering, Anna University, Chennai-600025.
- Dr. Sarat Kumar Maharana Professor, Dean R&D Department of Aeronautical Engineering, Acharya Institute of Technology, Bangalore-560107.

Date: 05/11/2019

Cha man

Board of Studies

Chairman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu.



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai

Dr.M.G.R.Nagar, Hosur-635130

19th BOARD OF STUDIES

FACULTY OF AERONAUTICAL ENGINEERING- 19th MEETING ON 05/11/2019

@ 10:30 AM 19.1 <u>New courses introduced/newly added</u> topics in corresponding courses in the year of 2019

SI.No	Semester	Subject	Subject Name	Remark
		Code		The existing syllabus has been entirely reframed with the following unit modules
1	VIII	818AEE04	Entrepreneurship Development Management & IPR	 Introduction of Entrepreneurship Entrepreneurial Development Agencies Project Management Introduction to Intellectual Property Patent Rights
2	VIII	818AEE06	Human Values and Professional Ethics	 Human Values Engineering Ethics Engineering as Social Experimentation Safety Responsibilities and Rights Global Issues
3	VIII	818AEE09	Air Transportation and Aircraft Maintenance Management	 Introduction Airline Economics Principle of Airline Scheduling Aircraft Reliability Technology in Aircraft Maintenance
	VIII	815AEE07	Computer Integrated Manufacturing	NEWLY ADDED TOPIC Unit 5:Industrial Robotics A. Robot Anatomy and Related Attributes B. Classification Of Robots C. Robot Control Systems D. End Effectors E. Sensors in Robotics F. Robot Accuracy and Repeatability G. Industrial Robot Applications H. Robot Part Programming I. Simple Problems

4	VI	618AEE08	Boundary layer Theory	 Navigation Guidance
1.00			Incory	3. Aircraft Controls
1-5-21		and the second	11 - C - C - C - C - C - C - C - C - C -	
1	Sec. 10. 171		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	4. Control Technique of Rockets and Missiles
	1		STORE REPORT	
5	VI	618MEO01	Annlind	5. Control of Space crafts
2	VI	OTOMEOUT	Applied	1. Fluid Power Principles and
No Pa			Hydraulics and	Fundamentals
			Pneumatics	2. Hydraulics Systems and
	Cal.		1.	Components
		of the state state.	and the second second	3. Control Components,
	- al - al	10000	1. S. V. 1	Accessories of Hydraulic
	1	A. 180 1	Section in the	System
		ALC: NO		4. Pneumatic System and
	S	1.1.1.1.1.1.1.1	177 - 177 V& 649	Components
	1.11	1.1.1.1.1.1.1		5. Hydraulic and Pneumatic
6	VI	618AEE12	Structural	circuit and Troubleshooting
U		VIONCE12	Dynamics	 Force Deflection Properties of Structures
			Dynamics	
	121.164			 Principles of Dynamics Natural Modes of Vibration
		1000	and a strategy was and	4. Energy Methods
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A PARTY OF A	Concern Law Section 4	5. Approximate Methods
7	VI	618AEP10	Aircraft Interior	1. Aircraft Seating Design
		oroner to	Design Laboratory	Arrangements(General Class
	- 10.1		Design Eaboratory)(2D)
1 C	1.00		The State of State	2. Aircraft Seating Design
.*	The	11. 11. 21	C. Company	Arrangement (Business Class
	1.1	8 923	P. Deschappenette)(2D)
	•.u	le de la		3. Aircraft Single Aisle Design
1.1		A. A. 186	Sec. Carlos	(2D)
	1. 12 -		19 - 19 - 19 - 19 - 19 - 19 - 19 - 19 -	4. Aircraft Twin Aisle Design
	1.1.1		1	(2D)
i they	35 A. 2021	the states	the state of the state of the	5. Aircraft Seat Design (3D
	in the start	可加入出行的	《同时》"是有国	Business Class)
1.1			La Souther	6. Aircraft Seat Design (3D Firs
	1. 1. 1. 1.	5 . 1 . 1 .	1	Class),
1		Sold Sa	M. Sect.	7. Design of Laptop Tray sizing
1	1 1 1 1 1	NA SX	R. S. S. Start	 for seating in Civil Aircrafts
1	1. 1. 1	1	Sec. 1.	8. Design of Windows for Civil Aircraft
				9. Design of Wind Shield for
	1. 23		1949 ST 284	Fighter Aircraft (Select
				anyone Airplane)
	1 2. 1		1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10. Design of Wind Shield for
	1. 1. 1	The second second	- Production	Passenger Aircraft (Select any
			a start and	one Airplane)
-	VI	615AEE05	Theory Of	The second reality -
		015AEE05	Theory Of Elasticity	NEWLY ADDED TOPIC
	品語「日日		Diasticity	Unit 2: Basic Equations Of
	1.2	: · · · · · · · · · · · · · · · · · · ·		Elasticity
		The residence		A. Strain-Displacement

				 B. Stress-Strain Relations C. Lame's constant-Cubical dilation D. Compressibility of Material E. Bulk Modulus F. Shear Modulus G. Compatibility equation for
				Stress and Strains H. Principal Stresses And Principal Strains I. Mohr's Circle J. Saint Venant's Principle
8	IV	418AEE06	Metal Joining Process and NDT	 Saint Venant's Principle Basic of Metal Joining Process Conventional Metal Joining Process Advanced Metal Joining Process Material Testing Non Destructive Testing
9	IV	418AEE08	Introduction to Space Technology	 Orbital Mechanics Orbits in Three Dimensions Orbital Maneuver Rocket Motion in Free Space and Gravitational Field Ballistic Missile Trajectories
10	IV	418AEE09	Experimental Aerodynamics	 Wind Tunnel Testing Experiments in Subsonic Wind Tunnel Experiments in High Speed Tunnels Measurement Techniques Aircraft Special Problems
11	IV 	418AEP10	CATIA V5 R 21 Laboratory	 Scaling, rotation, translation, editing, dimensioning- Typical CAD command Structure Wire Frame Modeling- Surface modeling Solid Modeling Advanced modeling CFD/FEM Fundamentals Part Design of an Aircraft Components
12	(14)(55) IV	418AEP11	Production	 7. Tool Design of an Aircraft Components Surface Design of Aircraft Components 1. Lathe
1			Technology Laboratory	1.1 Facing, Plain Turning, Step Turning

			 1.2 Taper Turning using Compound Rest 1.3 Taper Turning using Taper Turning Attachment 1.4 Single Start V thread Cutting and Knurling 1.5 Boring and Internal Thread Cutting 2. Shaper and Slotter 2.1 Machining a V block (in a Shaper) 2.2 Machining a Hexagonal shape (in a Shaper) 2.3 Machining Internal Keyway (in a Slotter) 3. Drilling 3.1 Drilling 4 or 6 holes at a given pitch circle on a plate 3.2 Drilling, Reaming and Tapping 4 Milling 4.1 Plain Milling Exercise 4.2 Gear Milling Exercise 5 Grinding Cylindrical Grinding Exercise
IV	418AEE10	Mechanics of Machine	 NEWLY ADDED TOPIC Unit 5: Vibration A. Free, Forced And Damped Vibrations Of Single Degree Of freedom System B. Forced Transmitted to Supports C. Vibration Isolation D. Vibration Absorption E. Torsional Vibration Of shaft F. Single and Multi-Rotor systems G. Geared Shaft H. Critical speed Of Shaft

Feedback obtained about curriculum and syllabus from stakeholders (Faculty, Students, Alumni and Employers) also discussed and concluded.

Date: 05/11/2019

Chairman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu.



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai DEPARTMENT OF AERONAUTICAL ENGINEERING Dr.M.G.R.NAGAR, HOSUR-635109.

19th BOARD OF STUDIES MEETING IN FACULTY IN AERONAUTICAL ENGINEERING ATTENDANCE DETAILS

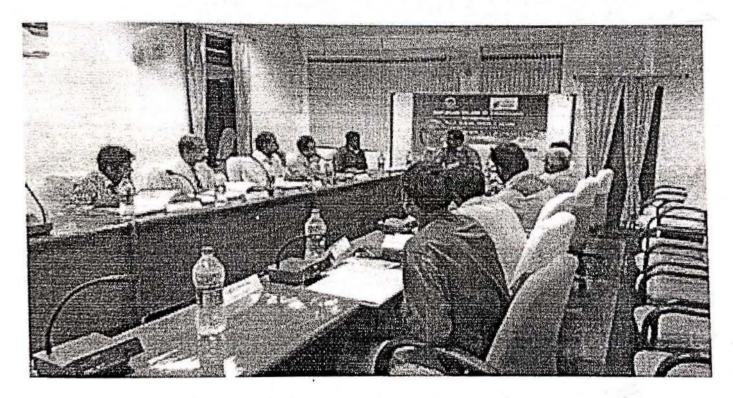
1	Name	Designation 0. 4 delesses	Catazza	Signature
io	Name	Designation & Address	Category	Signature
1.	Dr.J.Arivudainambi	Professor & Head Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109	Chairman	\$105
2.	Dr.V.Arumugam	Associate Professor Department of Aerospace Engineering MIT Campus, Anna University, Chennai-600044	University Nominee	E Absent - Dr. D. Stadhartha Dr. V. Senterilk
3.	Dr.A.Siddharthan	Assistant Professor Department of Mechanical Engineering, Anna University, Chennai-600025	Academic Council	Dr. S. Stadhartha
4.	Dr.V.Senthil Kumar	Associate Professor Department of Production Engineering, NIT Trichy, Tamil Nadu-620015	Nominee	Dr. V. Senterle
5.	Ms.M.Sharadha	Business Development Taneja Aerospace Aviation Ltd, Belagondapalli Village, Thally Road, Denkanikotta-Taluk, Krishnagiri District.	Industrial Expert	M. Sarathe -
6.	Ms.M.S.Deepika Kumar (GBM)	HR & Finance Manager Zing e-commerce pvt ltd. No.6, 2nd Cross, Byappanahalli Layout, Behind Swami Vivekanand Metro Station. Bangalore-560038.	Representative From Alumni	Deepiker He.s.
7.	Dr.S.V.Suresh Babu Professor & Head Department of Mechanical Engineering Adhiyamaan College of Engineering Hosur-635109.		Inter Disciplinary Expert	Sr. v. Sunds
8.	Mr.P.Muthusamy Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109.		Faculty Representative	P.J.
9.	Mr.T.Anand Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109		Faculty Representative	T.y
10). Ms.R.Priyanka	Assistant Professor Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109	Faculty Representative	& Mint.

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Chairman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu.



ADHIYAMAAN COLLEGE OF ENGINEERING (AUTONOMOUS) Affiliated to Anna University, Chennai Dr.M.G.R.Nagar, Hosur-635130



Members in Clock wise Direction:

Mr.P.Muthusamy, Dr.Channankiah, Dr.A.Siddharthan, Dr.V.Senthilkumar, Ms.M.S.Deepika Kumar(GBM), Dr.J.Arivudainambi, Ms.M.Sharadha, Mr.T.Anand



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai Dr.M.G.R.Nagar, Hosur-635109

20th BOARD OF STUDIES MEETING IN FACULTY OF AERONAUTICAL ENGINEERING

MINUTES OF THE 20th MEETING

Date: 14/10/2020

The 20th Board of Studies Meeting of Aeronautical Engineering held on 14/10/2020 at 2:00 PM.

Sl.No	Name	Category
1.	Dr.J.Arivudainambi	Chairman
2.	Dr. Yogesh Kumar Sinha	Anna University Nominee
3.	Dr.V.Senthilkumar	
4.	Dr. Babu. S	Academic Council Nominee
5.	Mr. Infant Dean Jones D	Industrial Expert
6.	Ms.Logini C	Representative From Alumni
7.	Dr.S.V.Suresh Babu	Inter Disciplinary Expert
8.	Mr.P.Muthusamy	Faculty Representative
9.	Mr.T.Anand	Faculty Representative-
10.	Ms.R.Priyanka	Faculty Representative

MEMBERS PRESENT

20.1 To consider the minutes of 19th Board of Studies meeting in Aeronautical Engineering held on 05/11/2019.

RESOLVED that the minutes of 19th Board of Studies Meeting in Aeronautical Engineering have been considered.

20.2 To consider the minutes of the Board of Studies meeting in Aeronautical Engineering held on 25/06/2020.

RESOLVED that the minutes of the Board of Studies Meeting in Aeronautical Engineering have been considered.

20.3 To consider the Syllabi of VII Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2017-2018. (Annexure I)

RESOLVED that the Syllabi of VII Semester B.E Aeronautical Engineering under Regulation 2015 for the batch of students admitted in the year of 2017-2018 be approved. (Annexure I)

20.4 To consider the Syllabi of V Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2018-2019. (Annexure II)

RESOLVED that the Syllabi of V Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2018-2019 be approved. (Annexure II)

20.5 To consider the Syllabi of III Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2019-2020. (Annexure III)

RESOLVED that the Syllabi of III Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2019-2020 be approved. (Annexure III)

20.6 To consider the Syllabi of VIII Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2017-2018. (Annexure IV)

RESOLVED that the Syllabi of VIII Semester B.E Aeronautical Engineering under Regulation 2015 (CBCS) for the batch of students admitted in the year of 2017-2018 be approved. (Annexure IV)

20.7 To consider the Syllabi of VI Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2018-2019. (Annexure V)

RESOLVED that the Syllabi of VI Semester B.E Aeronautical Engineering under **Regulation 2018 (CBCS)** for the batch of students admitted in the year of 2018-2019 be approved. (Annexure V)

20.8 To consider the Syllabi of IV Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2019-2020. (Annexure VI)

RESOLVED that the Syllabi of **IV** Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2019-2020 be approved. (Annexure VI)

20.9 To consider the panel of Examiners for the purpose of Evaluation. (Annexure VII)

RESOLVED that the panel of Examiners for the purpose of Evaluation be approved. (Annexure VII)

Date: 14/10/2020

Chairman

Board of Studies Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur · 635 109, Tamit Nadu.



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS)

Affiliated to Anna University, Chennai

Dr.M.G.R.Nagar, Hosur-635130

20th BOARD OF STUDIES

FACULTY OF AERONAUTICAL ENGINEERING- 20th MEETING ON 14/10/2020 @ 02:00 PM

20.10 <u>New courses introduced/newly added topics</u> in corresponding courses in the year of 2020

SI.No	Semester	Subject Code	Subject Name	Remarks
			1	The existing syllabus has been entirely reframed with the following unit modules
1	ш	318AET05	Production technology	NEWLY ADDED TOPICS UNIT 3; Machining 1. Lath 2. Shaper
			-	 Planer Universal milling machine
				5. Slotter
			1.00	6. Universal drilling machine
				7. Cylindrical grinding machine 8. Basics of CNC machines
2	III	315AEE07	Airline	1. Introduction
2	111	JIJALLOI	Operations and	2. Airport management
	10.56		managements	3. Air transport service
	2	- A - A	managements	4. Airline operation
		5 - 20 B		5. Logistic and cargo management
3	III	315AEE08	Pollution control	1. Source and effect of air pollution
5		STEREEUU	in aircraft	2. Dispersion of pollution
			industries	3. Air pollution control
1.1	1. 1. 1. 1.		menonite	4. Air quality management
18 C - 1	2.6			5. Noise pollution
4	III	315AEE09	Environmental	1. Air pollution
1.	1000		Safety	2. Environmental management standards
4	12	1	managements	3. Environmental measures and control-
		1946.00		4. Preventive environmental management system
	1	- 1 - 1 - 1		5. Environmental management system
5	III	315AEP11	Aero Modeling	1. Construction of paper glider
-		And the second second second	Laboratory	2. Design and construction of glider
S	6. De 17		Station and the	3. Design and Construction of water rocketry
1.1	61 A.M.			4. Design and fabrication of aerofoil and control
1		1.4.4		surface
	N 1	N		5. Design and fabrication of fuselage
				6. Study about electronic equipments used in UAV's
	1.1			7. Assembly of UAV electronic equipments
			1	8. Final assembly of UAV
	516	1.5	1	9. Testing and flying of UAV
	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1			10. Basic study about Hovercraft

	6	VII	718AEE06	Helicopter Aerodynamics	 Introduction to rotating wing concert Hovering flight dynamics Forward flight dynamics Climb and descent performance Ground effect missions
	7	VII	718AEE07	Helicopter maintenance	Newly added topics UNIT 2; Main rotor System 1. Blade alignment 2. Blade sweeping 3. Vibration 4. Tracking 5. Auto rotating adjustment 6. Push pull tubes
1.98	140		- 100 A		7. Electronic balancing
	8	VII	718AEE08	Airworthiness and certification	 Airworthiness and certification Airworthiness and procedure Health and usage monitoring Aircraft maintenance
			7.8		5. Flight evaluation
	9	VII	718MEO02	Non-Destructive Testing and Materials	 Introduction and visual inspection techniques Liquid penetrate testing and magnetic particle testing Eddy current testing and acoustic emission testing Ultrasonic testing Radiography, comparison and selection of NDT method
	10	vii •	718AEE14	Industrial engineering and managements	 Introduction Work Study, Incentives, Health and safety Motivation and Behavior Management and Behavioral Approach Process Management
	11	VII	718AEP11	Autonomous UAV Laboratory	 Study of list generation method Analysis of LOS/BLOS Study of electric systems Study of ethical implication Study of unmanned Aerial system Propulsion Analysis of Sensing / Surveillance Study of internal combustion engines Analysis of on-board flight control Study of turbine engine Building a working model of UAV flight
	12	v	518AET04	Propulsion II	NEWLY ADDED TOPICS UNIT 5; Advanced propulsion system 1. Electronic rocket propulsion system 2. Ion propulsion system 3. Nuclear rocket propulsion system 4. Solar sail 5. Preliminary concepts in nozzle less propulsion
	13	v	518AEE09	Space flight mechanics	 Basic concepts The General N-Body problem Satellite injection and satellite orbit perturbation Interplanetary Trajectories Ballistic missile Trajectories and materials

14	V	518AEE11	Unmanned Aircraft System	 Introduction to Unmanned aerial System Basic Aerodynamic of unmanned aerial system Design consideration of unmanned aerial system Stability and control Propulsion and surrivellance
15	V	518AEE13	Fundamentals of Flight	 Introduction to principles of flight Introduction to airplane structures & materials Power Plant used in Airplanes & Spacecrafts Aircraft Systems Basics of aerodynamics
16	v	518AEP12	Hypermesh laboratory	 Two dimension model meshing a. Mesh the given circular plate with hole. b. Mesh the given I section, L section, T section. c. Mesh the given plate with a hole and hexagon d. Mesh the given plate with a hole, Hexagon and ellipse Three dimension meshing a. Mesh the given clip repair model b. Mesh the given Car model c. Mesh the given Bracket model with riveting
17	IV	418AEE08	Introduction To Space Technology	 Orbital Mechanics Orbital Maneuver Rocket Motion In Free Space And Gravitational Field Ballistic Missile Trajectories
18	IV	418AET03	Aircraft System and Instrumentation	NEWLY ADDED TOPICS UNIT 4 ; Auxiliary System 1. Air cycle system 2. Vapor cycle system
1.98 1.98 1.99			·	 Fupor office system Evaporative vapor cycle system Evaporative air cycle system Deicing and Anti-icing system Fire protection system
19	IV	418AEE09	Experimental Aerodynamic	 Wind Tunnel Testing Experiments in Subsonic Wind Tunnel Experiment in high Speed Tunnel Measurement Techniques Aircraft Structural Problems
20	IV	415AEP10	CATIA V5 R 21 Laboratory	 Scaling, rotation, translation, editing, dimensioning- Typical CAD command Structure Wire Frame Modeling-Surface modeling Solid Modeling Advanced modeling
				 CFD/FEM Fundamentals Part Design of an Aircraft Components Tool Design of an Aircraft Components Surface Design of Aircraft Components

21	IV	415AEP11	Production Technology Laboratory	 Lathe Shaper and Slotter Drilling Milling Grinding
22	VI	615AEE09	Flight testing	NEWLY ADDED TOPICS UNIT 3; Radiative Heat Transfer 1. Airspeed in flight calibration 2. Level flight performance 3. Techniques and data reduction 4. Range and endurance estimation 5. Climb performance method
23	VI	615AEE08	Boundary Layer Theory	 Navigation Guidance Aircraft Controls Control techniques of Rockets And Missiles Control Of spacecraft
24	VI	615MEO01	Applied Hydraulics and pneumatics	 Fluid Power Principles And Fundamentals Hydraulic System And Components Control Components, Accessories Of Hydraulic system Pneumatic Systems And Components Hydraulic And Pneumatic Circuits and Troubleshooting
25	VI	615AEE12	Structural Dynamics	 Force deflection properties of structures Principles of dynamics Natural modes of vibration Energy methods Approximate methods
26	VI	615AEP10	Aircraft interior design Laboratory	 aircraft sitting designing arrangement (general class)(2d) aircraft sitting designing arrangement (business class)(2d) Aircraft simgle aisle design(2d) Aircraft twin aisle design(2d) Aircraft seat design(3d business class) Aircraft seat design(3d first class) Design of laptop tray sizing of seats and civil aircraft Design of window for civil aircraft Design of wind shield for fighter aircraft Design of wind shield for passenger aircraft
27	VIII	818AEE43	Rocket and missile	NEWLY ADDED TOPICS UNIT 4; 1. Rocket vector control 2. Thrust determination 3. Multistageing of rockets 4. Vehicle optimization 5. Stage Separation Dynamics 6. Separation techniques

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Chairman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu. 1



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai DEPARTMENT OF AERONAUTICAL ENGINEERING Dr.M.G.R.NAGAR, HOSUR-635130.

20th BOARD OF STUDIES MEETING IN FACULTY IN AERONAUTICAL ENGINEERING (ONLINE MODE)

N.	E THE WEATHER AND A STREET		Date: 14-10-2020	
I.No	Members name with Designation	Category	Mode online /offliline	
1.	Dr.J.Arivudainambi Professor & Head Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635130	Chairman	Online	
2.	Dr. Yogesh Kumar Sinha Professor & Head, Aeronautical Engineering Rajalakshmi Engineering College Rajalakshmi Nagar Thandalam, Chennai - 602 105.	University Nominee	Online	
3.	Dr. Babu. S Associate Professor Department of Mechanical Engineering PSG College of Technology Coimbatore, Tamil Nadu-641004	Academic Council	Online Online	
4.	Dr.V.Senthil Kumar Associate Professor Department of Production Engineering, NIT Trichy, Tamil Nadu-620015	Nominee .		
5.	Infant Dean Jones D Key Account Manager – Business Development Maini Precision Products (Aerospace Division) 122, C-E, Bommasandra Industrial Area, Banglore-560099.	Industrial Expert	Online	
6.	Ms.Logini C Senior Network Engineer First Advantage Global Operating Centre Pvt. Ltd, Whitefield Main Rd, Bengaluru- 560066.	Representative From Alumni	Online	
7.	Professor & Head Department of Mechanical Engineering Adhiyamaan College of Engineering-Hosur-635130	Inter Disciplinary Expert	Online	
8	Department of Aeronautical Engineering Adhiyamaan College of Engineering-Hosur-635130	Faculty Representative	Online	
. 9	 Mr.T.Anand /AP Department of Aeronautical Engineering Adhiyamaan College of Engineering-Hosur-635130 	Faculty Representative	Online	
1	 Ms.R.Priyanka/AP Department of AeronauticalEngineering Adhiyamaan College of Engineering- Hosur-635130 	Faculty Representative	Online	

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Chairman Board of Studies Chairman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur-635 109, Tamil Nadu. About this call

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Yogesh Kumar Sir You



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ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai Dr.M.G.R.Nagar, Hosur-635109

21" BOARD OF STUDIES MEETING IN FACULTY OF AERONAUTICAL ENGINEERING

MINUTES OF THE 21st MEETING

Date: 08/04/2021

The 21st Board of Studies Meeting of Aeronautical Engineering held on 07/04/2021 at 2:00 PM.

SI.No	Name	Category	
1.	Dr.J.Arivudainambi	Chairman	
2.	Dr. Yogesh Kumar Sinha	Anna University Nominee	
3.	Dr.V.Senthilkumar		
4.	Dr. Babu. S	Academic Council Nominee	
5.	Mr. Infant Dean Jones D	Industrial Expert	
6.	Ms.Logini C	Representative From Alumni	
7.	Dr.S.V.Suresh Babu	Inter Disciplinary Expert	
8.	Mr.P.Muthusamy	Faculty Representative	
9. Mr.T.Anand		Faculty Representative	
10. Ms.R.Priyanka		Faculty Representative	

MEMBERS PRESENT

21.1 To consider the minutes of 20th Board of Studies meeting in Aeronautical Engineering held on 14/10/2020 @ 2:00 PM.

RESOLVED that the minutes of 20th Board of Studies Meeting in Aeronautical Engineering have been considered.

21.2 To consider the Syllabi of VII Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2018-2019. (Annexure I)

RESOLVED that the Syllabi of **VII** Semester B.E Aeronautical Engineering under Regulation 2018 for the batch of students admitted in the year of 2018-2019 be approved. (Annexure I)

21.3 To consider the Syllabi of V Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2019-2020. (Annexure II)

RESOLVED that the Syllabi of V Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2019-2020 be approved. (Annexure II)

21.4 To consider the Syllabi of III Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2020-2021. (Annexure III)

RESOLVED that the Syllabi of **III** Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2020-2021 be approved. (Annexure III)

21.5 To consider the panel of Examiners for the purpose of Evaluation. (Annexure IV)

RESOLVED that the panel of Examiners for the purpose of Evaluation be approved. (Annexure IV)

Date: 08/04/2021

Chairman Board of Studies



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai

Dr.M.G.R.Nagar, Hosur-635130

21th BOARD OF STUDIES FACULTY OF AERONAUTICAL ENGINEERING- 21th MEETING ON 07/04/2021 @ 2:00 PM

21.1 New courses introduced/newly added topics in corresponding courses in the year of 2021

Sl.No	Semester	Subject Code	Subject Name	Remark
				The existing syllabus has been entirely reframed with the following unit modules
1	VII	718AEE06	Helicopter Aerodynamic	 Introduction Of Rotating Wing Concept Hovering Flight Dynamics
				 Forward Flight-Dynamics Climb And Decent
•	1914			Performance 5. Ground Effects Machines
2	VII	718AEE08	Airworthiness and Certification	 Airworthiness and Certification Airworthiness and
a de la			· · ·	 Airworthiness and Procedure Aircraft Maintenance
5 (P	5			 4. Healthy and Usage Monitoring
1	- 16 - 19 A	1.19		5. Flight Evaluation
3	VII	718MEO02	Non Destructive Testing and Materials	1. Introduction And Visual Inspection Techniques
1				2. Liquid Penetrant Testing And Magnetic Testing
4				3. Eddy Current Testing and Acoustic Emission Testing
				 Ultrasonic Testing Radiography, Comparison
				And Selection Of NDT Method
4	VII	718AEE14	Industrial Engineering And Management	1. Introduction

1	12 34	er pice.	,	2. Work Study, Incentives, Health And Safety
		Sec. St.		3. Motivation And Behavior
	155/161		and the second sec	4. Management And
	1. 19. 1			Behavioral Approach
	and the second second			5. Process Management
5	VII	718AEP11	Autonomous UAV	1. Study Of Lift Generation
			Laboratory	Method
	the second		2400141019	2. Analysis Of LOS/BLOS
	- Cr			3. Study Of Ethical
	3. N			Implication
	1 N 1		a 12 di di di	4. Analysis Of Electric
				System
				5. Study Of Unmanned
				Aerial System Propulsion
			2 BY 11 - 3	6. Analysis Of On-Board
				Flight Control
			the second second	7. Study Of Internal
	15 - Long		And the second second	Combustion Engine
	1.115	197		 Analysis Of Sensing/ Surveillance
	1.0			
				9. Study Of Turbine Engine
	1. A. A. A.		and the second	 Building a working model of UAV Flight
1.2	VII	718AEE11	Principles Of	NEWLY ADDED TOPIC
			Management and	Unit 5: Elements Of Business
			Business concept	Activity
	S - 5 /	sa ng so i		A. Purchasing-choosing
	S. 1. 201			of Suppliers
				B. Overview Of Stock Control
	·			C. Production-Scale of
	124 2 11		* 1, 1	Production
	1		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	D. Main Features Of Job
	i and			E. Mass and Batch
				Production System
2.1	1.1.1.1.1.1.1.1	1	CRAT STATES	F. Marketing-Concept
	1 Same		Contraction of the second	And Role Of
-	· · · · · ·			Marketing
1.44	1-21-00			G. Marketing Mix
2 - 1 -			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	H. Channels Of
81.4	1. 1. 1. 1.			Distribution
		1. A.		I. Finance-Sources of
				Finance
			•	
	1 A		· · · · · · · · · · · · · · · · · · ·	J. Assessing Business

6	V	518AEE09	Space Flight Mechanics	 Basic Concepts The General N-Body
	1.50 A M 1			Problems
a 2	2.1. 2.1		Solution - Sectors	3. Satellite Injection And
100	1.1.1.1			Satellite Orbit
-	1.			Perturbations
	1			4. Interplanetary Trajectories
1.	1 - 121			5. Ballistic Missile
1.		Line and States	10 M 10 M 10 M 10 M	Trajectories And Material
7	v	518AEE11	Unmanned Aircraft	1. Introduction Of
	1		System	Unmanned Aircraft
			•	System
5 T 13	1.4		1 A.C. 2444 (1997)	2. Basics Aerodynamic Of
S				Unmanned Aircraft
2	1.1			System
			- "Y	3. Design Consideration of
P - 27				Unmanned Aircraft
	24 - C			System
	111		1	4. Stability And Control
1	TAX NEWS			5. Propulsion And
1.	Sec. 1			Surveillance
8	V	518AEE13	Fundamentals Of Flight	1. Introduction To Principles
				Of Flight
			1.00 / 1. BOX	2. Introduction To Airplane
×	1.0		and the second	Structures and Material
				3. Power Plants Used in
		111111	1	Airplanes & Spacecraft
1.1			Carlos Carlos Carlos	4. Aircraft Systems
	28° - 2° 1°			5. Basics Of Aerodynamics
. 9	V	518AEP12	Hyper mesh Laboratory	1.Two Dimensional Model
Sec.	A. 19		,,	Meshing
1.00	1. 2. 2. 1			A. Mesh The Given
1.1.1	1222			Circular plate with
Sec. 4	· · · ·		The second second second	Circular plate with a Hole
1. 1	1. S. C. S. C.	1		
12 6 3	T. Section	10 A.	1	B. Mesh The Given I
1.0		and the second	and the second second	Section, L section
PSA N	1.1.1.2.1		1	And T section
4.8	11515	1. A. A. A. A. A.	A CAR AND A SALES	C. Mesh The Given
State 1	12 24 21			Plate With a Hole
	1. 1. 1. 1.		THE REAL PROPERTY.	and Hexagon
			4	D. Mesh The Given
12.1		80. MEN 3		Plate With a Hole,
1.	1			Hexagon and
1	1 . Mar 2.	The sur		Ellipse
			and the second second	2. Three Dimensional
				Meshing

				 A. Mesh The Given clip Repair Model B. Mesh The Given car Model C. Mesh The Given Aircraft Model D. Mesh The Given Bracket Model with Riveting
	V	518AEE08 √	Aerospace Quality Assurance	NEWLY ADDED TOPIC Unit 1:Quality Concepts And Assurance A. Concept And
			•	Definition B. Design Specifications C. Quality Manufacture
		1 a 1 1		In Conformance With Design Applications D. Role Of Quality Assurance During usage Of Aircraft
10				 E. Repair Of Aircraft and Its Aggregates F. Concession And Deviations G. Production Permits
10	ш	318AEE07	Airline And Airport Operation	 Introduction Airport Management Air transport Services Airline Operation Logistics And Air Cargo
11		318AEE08	Pollution Control in Aircraft Industries	Management 1. Sources And Effects Of Air Pollutants 2. Dispersion Of Pollutants 3. Air Pollution Control
, and	1.18	4		4. Air Quality Management
12	III	318AEE09	Environmental Safety Management	 Noise Pollution Air Pollution Environmental Management Standards Environmental Measurement And Contro Preventive Environmental

			 1.2 Taper Turning using Compound Rest 1.3 Taper Turning using Taper Turning Attachment 1.4 Single Start V thread Cutting and Knurling 1.5 Boring and Internal Thread Cutting 2. Shaper and Slotter 2.1 Machining a V block (in a Shaper) 2.2 Machining a Hexagonal shape (in a Shaper) 2.3 Machining Internal Keyway (in a Slotter) 3. Drilling 3.1 Drilling 4 or 6 holes at a given pitch circle on a plate 3.2 Drilling, Reaming and Tapping 4 Milling 4.1 Plain Milling Exercise 4.2 Gear Milling Exercise 5 Grinding Cylindrical Grinding Exercise
IV	418AEE10	Mechanics of Machine	 NEWLY ADDED TOPIC Unit 5: Vibration A. Free, Forced And Damped Vibrations Of Single Degree Of freedom System B. Forced Transmitted to Supports C. Vibration Isolation D. Vibration Absorption E. Torsional Vibration Of shaft F. Single and Multi-Rotor systems G. Geared Shaft H. Critical speed Of Shaft

Feedback obtained about curriculum and syllabus from stakeholders (Faculty, Students, Alumni and Employers) also discussed and concluded.

Date: 05/11/2019

Chairman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu.



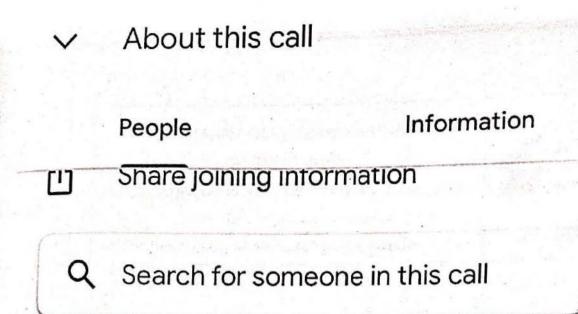
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21st BOARD OF STUDIES MEETING IN FACULTY IN AERONAUTICAL ENGINEERING (ONLINE MODE)

			Date: 07-04-2021
SI.No	Members name with Designation	Category .	Mode online /offliline
1.	Dr.J.Arivudainambi Professor & Head Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635130	Chairman	Online
2.	Dr. Yogesh Kumar Sinha Professor & Head, Aeronautical Engineering Rajalakshmi Engineering College Rajalakshmi Nagar Thandalam, Chennai - 602 105.	University Nominee	Online
3.	Dr. Babu. S Associate Professor Department of Mechanical Engineering PSG College of Technology Coimbatore, Tamil Nadu-641004	Academic Council	Online
4.	Dr.V.Senthil Kumar Associate Professor Department of Production Engineering, NIT Trichy, Tamil Nadu-620015		Online
5.	Infant Dean Jones D Key Account Manager – Business Development Maini Precision Products (Aerospace Division) 122, C-E, Bommasandra Industrial Area, Banglore-560099.	Industrial Expert	Online
6.	Ms.Logini C Senior Network Engineer First Advantage Global Operating Centre Pvt. Ltd, Whitefield Main Rd, Bengaluru- 560066.	Representative From Alumni	Online
7.	Dr. S V Suresh Babu Professor & Head Department of Mechanical Engineering Adhiyamaan College of Engineering-Hosur-635130	Inter Disciplinary Expert	Online
8	Mr.P.Muthusamy /AP Department of Aeronautical Engineering Adhiyamaan College of Engineering-Hosur-635130	Faculty Representative	Online
9.	Mr.T.Anand /AP Department of Aeronautical Engineering Adhiyamaan College of Engineering-Hosur-635130	Faculty Representative	Online
10.	Ms.R.Priyanka/AP Department of AeronauticalEngineering Adhiyamaan College of Engineering-Hosur-635130	Faculty Representative	Online

Charman

Board of Studies Board of Studies Faculty of Aeronau lical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu.



IN-CALL



Muthusamy P (You)



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Nambi Arivudai Meeting host

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Priya Ragu



S.V.SURESH Babu



Yogesh Kumar Sir You



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ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai Dr.M.G.R.Nagar, Hosur-635130

22nd BOARD OF STUDIES MEETING IN FACULTY OF AERONAUTICAL ENGINEERING

MINUTES OF THE 22nd MEETING

Date: 09/10/2021

The 22nd Board of Studies Meeting of Aeronautical Engineering held on 09/10/2021 at 2:00 PM.

SI.No	Name	Category	
1.	Dr.J.Arivudainambi	Chairman	
2.	Dr. Yogésh Kumar Sinha	Anna University Nominee	
3.	Dr.V.Senthilkumar		
4.	Dr. Babu. S	Academic Council Nominee	
5.	Mr. Infant Dean Jones D	Industrial Expert	
6.	Ms.Logini C	Representative From Alumni	
7.	Dr.S.V.Suresh Babu	Inter Disciplinary Expert	
8.	Mr.P.Muthusamy	Faculty Representative	
9.	Mr.T.Anand	Faculty Representative	
10.	Ms.R.Priyanka	Faculty Representative	

MEMBERS PRESENT

22.1 To consider the minutes of 21st Board of Studies meeting in Aeronautical Engineering held on 07/04/2021 @ 2:00 PM.

RESOLVED that the minutes of 21st Board of Studies Meeting in Aeronautical Engineering have been considered.

22.2 To consider the Syllabi of VIII Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2018-2019. (Annexure I)

RESOLVED that the Syllabi of **VIII** Semester B.E Aeronautical Engineering under Regulation 2018 for the batch of students admitted in the year of 2018-2019 be approved. (Annexure I)

22.3 To consider the Syllabi of VI Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2019-2020. (Annexure II)

RESOLVED that the Syllabi of **VI** Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2019-2020 be approved. (Annexure II)

22.4 To consider the Syllabi of IV Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2020-2021. (Annexure III)

RESOLVED that the Syllabi of **IV** Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2020-2021 be approved. (Annexure III)

22.5 To consider the panel of Examiners for the purpose of Evaluation. (Annexure IV)

RESOLVED that the panel of Examiners for the purpose of Evaluation be approved. (Annexure IV)

Date: 09/10/2021

Chairman Board of Studies Chairman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu.



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS)

Affiliated to Anna University, Chennai

Dr.M.G.R.Nagar, Hosur-635130

22nd BOARD OF STUDIES FACULTY OF AERONAUTICAL ENGINEERING- 22nd MEETING ON 09/10/2022 @ 2:00 PM

Sl.No	Semester	Subject	Subject Name	Remark
		Code		The existing syllabus has been entirely reframed with the following unit modules
1	VIII	818AEE04	Entrepreneurship Development Management & IPR	 Introduction of Entrepreneurship Entrepreneurial Development Agencies Project Management
				 Introduction to Intellectual Property Patent Rights
2	VIII	818AEE06	Human Values and Professional Ethics	 Human Values Engineering Ethics Engineering as Social
				 Experimentation 4. Safety Responsibilities and Rights 5. Global Issues
3	VIII	818AEE09	Air Transportation and Aircraft Maintenance Management	 Introduction Airline Economics Principle of Airline Scheduling Aircraft Reliability Technology in Aircraft Maintenance
	VII	818AEE09	Computer Aided Design/ Computer Aided Manufacture	NEWLY ADDED TOPICS Unit 2: Geometric Modeling A. Requirements B. Geometric Models C. Geometric Construction Model D. Curve Representation method

				E. Surface Representation MethodsF. Modeling Facilities Desired
4	VI	618AEE08	Boundary layer Theory	 Navigation Guidance Aircraft Controls Control Technique of Rockets and Missiles
5	VI	618MEO01	Applied Hydraulics and Pneumatics	 Control of Space crafts Fluid Power Principles and Fundamentals Hydraulics Systems and Components Control Components, Accessories of Hydraulic System Pneumatic System and Components Hydraulic and Pneumatic circuit and Troubleshooting
6	VI	618AEE12	Structural Dynamics	 Force Deflection Properties of Structures Principles of Dynamics Natural Modes of Vibration Energy Methods Approximate Methods
7	VI	618AEP10	Aircraft Interior Design Laboratory	 Approximate Methods Aircraft Seating Design Arrangements(General Class)(2D) Aircraft Seating Design Arrangement (Business Class) (2D) Aircraft Single Aisle Design (2D) Aircraft Twin Aisle Design (2D) Aircraft Seat Design (3D Business Class) Aircraft Seat Design (3D First Class) Design of Laptop Tray sizing for seating in Civil Aircrafts Design of Windows for Civil Aircraft

				 Design of Wind Shield for Fighter Aircraft (Select anyone Airplane) Design of Wind Shield for Passenger Aircraft (Select any one Airplane)
	VI	618AEE11	Space Flight Navigation And Guidance Control	NEWLY ADDED TOPICS Unit 5: Control Of Spacecraft A. Launch Of Satellite Spacecraft B. Terminal Control Of Spacecraft Attitude C. Optimal Single Axis Rotation Of Spacecraft D. Multi Axis Rotation Maneuvers Of Spacecraft E. Spacecraft Control Torques F. Rocket Thrusters G. Reaction Wheels
8	ĪV	418AEE06	Metal Joining Process and NDT	 Basic of Metal Joining Process Conventional Metal Joining Process Advanced Metal Joining Process Material Testing
9	IV	418AEE08	Introduction to Space Technology	 5. Non Destructive Testing 1. Orbital Mechanics 2. Orbits in Three Dimensions 3. Orbital Maneuver 4. Rocket Motion in Free Space and Gravitational Field 5. Ballistic Missile Trajectories
10	IV	418AEE09	Experimental Aerodynamics	 Wind Tunnel Testing Experiments in Subsonic Wind Tunnel Experiments in High Speed Tunnels Measurement Techniques
11	IV	418AEP10	CATIA V5 R 21 Laboratory	 Aircraft Special Problems Scaling, rotation, translation, editing, dimensioning-Typical CAD command Structure Wire Frame Modeling-Surface modeling Solid Modeling

				 Advanced modeling CFD/FEM Fundamentals Part Design of an Aircraft Components Tool Design of an Aircraft Components Surface Design of Aircraft Components
12	IV	418AEP11	Production Technology Laboratory	 Lathe Lathe Facing, Plain Turning, Step Turning
	IV	418AEE07	Aerospace Material	NEWLY ADDED TOPICS Unit 5: Super Alloys And Other Materials A. Iron Base B. Nickel Base and Cobalt Base Super Alloys C. Composition Control D. Solid Solution Strengthening

	4	E. Precipitation Hardening by Gamma Prime
		F. Grain Boundary
		Strengthening
Street and		G. TCP phase
	10 - 20 - 20	H. Brittlement
		I. High Temperature Ceramics

Date: 09/10/2021 -

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Chairman Board of Studies

Chairman Board of Studies Faculty of Aeronauticat Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur-635 109, Tamil Nadu.

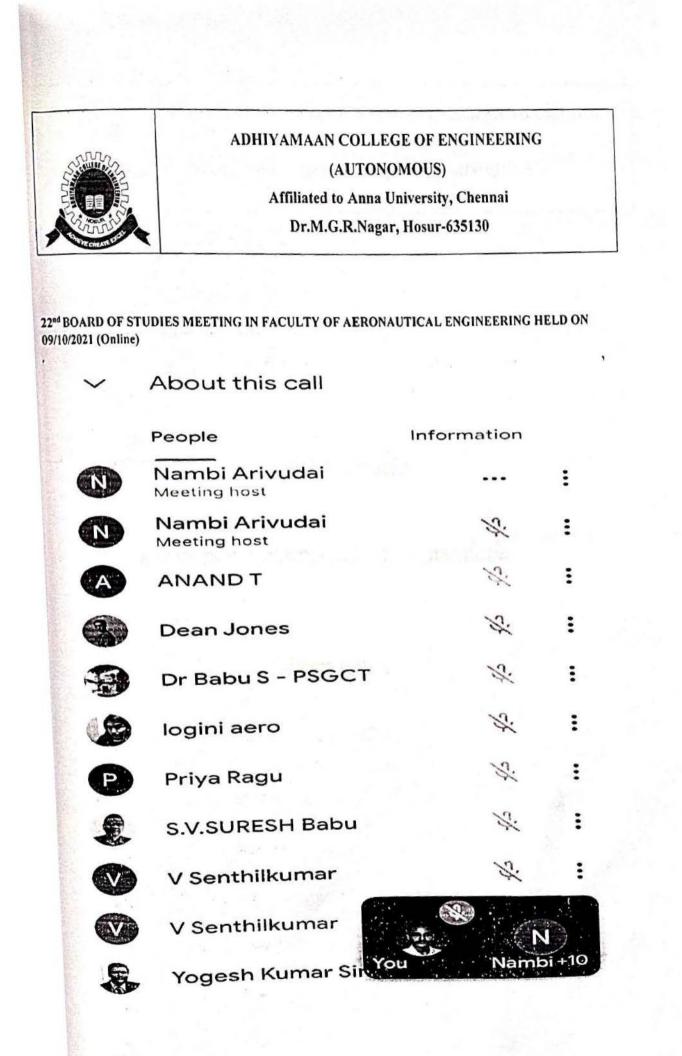


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SI.No	2 nd BOARD OF STUDIES MEETING IN FACULTY Members name with Designation		Date: 09-10-202
1.	Dr.J.Arivudainambi	Category	Signature
	Professor & Head Department of Aeronautical Engineering Adhiyamaan College of Engineering Hosur-635109	Chairman	Online
2.	Dr. Yogesh Kumar Sinha Professor & Head, Aeronautical Engineering Rajalakshmi Engineering College Rajalakshmi Nagar Thandalam, Chennai - 602 105. Dr. Babu, S	University Nominee	Online
	Associate Professor Department of Mechanical Engineering PSG College of Technology Coimbatore, Tamil Nadu-641004	Academic Council	Online
4.	Dr.V.Senthil Kumar Associate Professor Department of Production Engineering, NIT Trichy, Tamil Nadu-620015	Nominee -	Online
5.	Infant Dean Jones D Key Account Manager – Business Development Maini Precision Products (Aerospace Division) 122, C-E, Bommasandra Industrial Area, Banglore-560099.	Industrial Expert	Online
6.	Ms.Logini C Senior Network Engineer First Advantage Global Operating Centre Pvt. Ltd, Whitefield Main Rd, Bengaluru- 560066.	Representative From Alumni	Online
7.	Dr. S V Suresh Babu Professor & Head Department of Mechanical Engineering Adhiyamaan College of Engineering-Hosur-635109.	Inter Disciplinary Expert	Online
8.	Mr.P.Muthusamy /AP Department of Aeronautical Engineering Adhiyamaan College of Engineering-Hosur-635109.	Faculty Representative	82
9.	Mr.T.Anand /AP Department of Aeronautical Engineering Adhiyamaan College of Engineering-Hosur-635109	Faculty Representative	Ting
10.	Ms.R.Priyanka /AP Department of AeronauticalEngineering Adhiyamaan College of Engineering- Hosur-635109	Faculty Representative	Fing

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23rd BOARD OF STUDIES MEETING IN FACULTY OF AERONAUTICAL ENGINEERING

MINUTES OF THE 23rd MEETING

Date: 20/08/2022

The 23rd Board of Studies Meeting of Aeronautical Engineering held on 20/08/2022 @ 11:00 AM.

SI.No	Name	Category	
1.	Dr.J.Arivudainambi	Chairman	
2.	Dr. Yogesh Kumar Sinha	Anna University Nominee	
3.	Dr.V.Senthilkumar	Academic Council Nominee	
4.	Dr. Babu. S		
5.	Mr. Infant Dean Jones D	Industrial Expert	
6.	Ms.Logini C	Representative From Alumn	
7.	Dr.S.V.Suresh Babu	Inter Disciplinary Expert	
8.	Mr.P.Muthusamy	Faculty Representative	
9.	Mr.K.Hariharan	Faculty Representative	
10.	Ms.M.Nandhini	Faculty Representative	

23.1 To consider the minutes of 21st Board of Studies meeting in Aeronautical Engineering held on 09/10/2021 @ 2:00 PM.

RESOLVED that the minutes of 20th Board of Studies Meeting in Aeronautical Engineering have been considered.

23.2 To consider the Syllabi of VII Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2019-2020. (Annexure I)

RESOLVED that the Syllabi of VII Semester B.E Aeronautical Engineering under Regulation 2018 for the batch of students admitted in the year of 2019-2020 be approved. (Annexure I)

MEMBERS PRESENT

23.3 To consider the Syllabi of V Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2020-2021. (Annexure II)

RESOLVED that the Syllabi of V Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2020-2021be approved. (Annexure II)

23.4 To consider the Syllabi of Ill Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2021-2022. (Annexure III)

RESOLVED that the Syllabi of III Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted in the year of 2021-2022 be approved. (Annexure III)

23.5 To consider the panel of Examiners for the purpose of Evaluation. (Annexure IV)

RESOLVED that the panel of Examiners for the purpose of Evaluation be approved. (Annexure IV)

Updates made in VIII semester curriculum/Syllabus during 23rd BoS

As per the suggestion given by the Board Members, changes are made in the following Professional Core & Professional Elective subjects in VIII Semester B.E Aeronautical Engineering under Regulation 2018 (CBCS) for the batch of students admitted during the period 2019-2023.

Newly added topics:

ROCKET AND MISSILES (818AET01):

Unit – II Aerodynamics of rockets and missiles

Topics included :Lateral & Longitudinal Aerodynamic Moment of a Rocket – lift and Drag forces.

Unit - III Rocket motion in free space and gravitational field

Topics included : Homogeneous Gravitational Fields – description of Vertical, Inclined and Gravity Turn Trajectories .

COMPUTER INTEGRATED MANUFACTURING (818AEE07):

Unit -II Production and process planning

Topics included : Shop Floor Control-Inventory Control – Brief on Manufacturing Resource Planning-II (MRP-II) & Enterprise Resource Planning (ERP).

Unit - V Flexible manufacturing system and vehicle guidance

Topics included : Automated Guided Vehicle System (AGVS) – AGVS Application – Vehicle Guidance technology – Vehicle Management & Safety

Special Approvals

As per the suggestion given by the Board Members, changes are made in the following One Credit Courses VI and IV Semester in B.E Aeronautical Engineering under R2018 (CBCS) for the batch of students.

One Credit Course:

- Introduced Aerospace Technical Documentation and Gas Turbine Service Engineering To create more Employment opportunities for third year students to learn, the Aerospace Technical Documentation and Publication at Aerotics Technologies -Bangalore.
- Introduced Aircraft Design and Rocketry by using (Catia-V5, Creo, CFD)—As value added course for second year students to learn, design and analysis of aircraft components for production thru experts.

Certification Course:

- Drone Piloting and Safety Awareness
- Satellite and Communication
- > Personality Development Event

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Board of Studies Churman Board of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu.



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai

Dr.M.G.R.Nagar, Hosur-635130

22nd BOARD OF STUDIES FACULTY OF AERONAUTICAL ENGINEERING- 22nd MEETING ON 09/10/2022 @ 2:00 PM

SI.No	Semester	Subject	Subject Name	Remark
		Code		The existing syllabus has been entirely reframed with the following unit modules
1	VIII	818AEE04	Entrepreneurship Development Management & IPR	 Introduction of Entrepreneurship Entrepreneurial Development Agencies Project Management Introduction to Intellectual Property Patent Rights
2	VIII	818AEE06	Human Values and Professional Ethics	 Human Values Engineering Ethics Engineering as Social Experimentation Safety Responsibilities and Rights Global Issues
3	VIII	818AEE09	Air Transportation and Aircraft Maintenance Management	 Introduction Airline Economics Principle of Airline Scheduling Aircraft Reliability Technology in Aircraft Maintenance
	VIII	818AEE09	Computer Aided Design/ Computer Aided Manufacture	NEWLY ADDED TOPICS Unit 2: Geometric Modeling A. Requirements B. Geometric Models C. Geometric Construction Model D. Curve Representation method

				 E. Surface Representation Methods F. Modeling Facilities Desired
4	VI	618AEE08	Boundary layer Theory	 Navigation Guidance Aircraft Controls Control Technique of Rockets and Missiles Control of Space crafts
5	VI	618MEO01	Applied Hydraulics and Pneumatics	 Fluid Power Principles and Fundamentals Hydraulics Systems and Components Control Components, Accessories of Hydraulic System Pneumatic System and Components Hydraulic and Pneumatic circuit and Troubleshooting
6	VI	618AEE12	Structural Dynamics	 Force Deflection Properties of Structures Principles of Dynamics Natural Modes of Vibration Energy Methods Approximate Methods
7	VI	618AEP10	Aircraft Interior Design Laboratory	 Aircraft Seating Design Arrangements(General Class)(2D) Aircraft Seating Design Arrangement (Business Class) (2D) Aircraft Single Aisle Design (2D) Aircraft Twin Aisle Design (2D) Aircraft Seat Design (3D Business Class) Aircraft Seat Design (3D First Class) Aircraft Seat Design (3D First Class) Design of Laptop Tray sizing for seating in Civil Aircrafts Design of Windows for Civil Aircraft

					 Design of Wind Shield for Fighter Aircraft (Select anyone Airplane) Design of Wind Shield for Passenger Aircraft (Select any one Airplane) 	
		VI	618AEE11	Space Flight Navigation And Guidance Control	NEWLY ADDED TOPICS Unit 5: Control Of Spacecraft A. Launch Of Satellite Spacecraft B. Terminal Control Of Spacecraft Attitude C. Optimal Single Axis Rotation Of Spacecraft D. Multi Axis Rotation Maneuvers Of Spacecraft E. Spacecraft Control Torques F. Rocket Thrusters G. Reaction Wheels	
	8	IV	418AEE06	Metal Joining Process and NDT	 Basic of Metal Joining Process Conventional Metal Joining Process Advanced Metal Joining Process Material Testing Non Destructive Testing 	
	9	IV	418AEE08	Introduction to Space Technology	 Orbital Mechanics Orbits in Three Dimensions Orbital Maneuver Rocket Motion in Free Space and Gravitational Field Ballistic Missile Trajectories 	
	10	IV	418AEE09	Experimental Aerodynamics	 Wind Tunnel Testing Experiments in Subsonic Wind Tunnel Experiments in High Speed Tunnels Measurement Techniques Aircraft Special Problems 	
	Value Added Courses are Recommended					
	11	IV	418AEP10	CATIA V5 R 21 Laboratory	1. Scaling, rotation, translation, editing, dimensioning-Typical CAD command Structure	

					 Wire Frame Modeling-Surface modeling Solid Modeling Advanced modeling CFD/FEM Fundamentals Part Design of an Aircraft Components Tool Design of an Aircraft Components Surface Design of Aircraft Components
	12	IV	418AEP11	Production Technology Laboratory	 Lathe Lathe Facing, Plain Turning,
,		IV	418AEE07	Aerospace Material	NEWLY ADDED TOPICS Unit 5: Super Alloys And Other Materials A. Iron Base B. Nickel Base and Cobalt Base Super Alloys C. Composition Control

D. Solid Solution
Strengthening
E. Precipitation Hardening by
Gamma Prime
F. Grain Boundary
Strengthening
G. TCP phase
H. Brittlement
I. High Temperature Ceramics

Feedback obtained about curriculum and syllabus from stakeholders (Faculty, Students, Alumni and Employers) also discussed and concluded.

Date: 09/10/2022

Chairman Broaddoff Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hesur - 635 109, Tamil Nadu.



ADHIYAMAAN COLLEGE OF ENGINEERING, (AUTONOMOUS) Affiliated to Anna University, Chennai DEPARTMENT OF AERONAUTICAL ENGINEERING Dr.M.G.R.NAGAR, HOSUR-635109.

22nd BOARD OF STUDIES MEETING IN FACULTY IN AERONAUTICAL ENGINEERING Date: 09-10-2021

Members name with Designation Signature Category SI.No Dr.J.Arivudainambi 1. Professor & Head Department of Aeronautical Engineering ---Online--Chairman Adhiyamaan College of Engineering Hosur-635109 Dr. Yogesh Kumar Sinha 2. Professor & Head, Aeronautical Engineering ---Online--University Nominee Rajalakshmi Engineering College Rajalakshmi Nagar Thandalam, Chennai - 602 105. Dr. Babu. S 3. Associate Professor --- Online--Department of Mechanical Engineering PSG College of Technology Academic Council Coimbatore, Tamil Nadu-641004 Nominee Dr.V.Senthil Kumar 4. ---Online--Associate Professor Department of Production Engineering, NIT Trichy, Tamil Nadu-620015 Infant Dean Jones D 5. Key Account Manager - Business Development Industrial Expert ---Online--Maini Precision Products (Aerospace Division) 122, C-E, Bommasandra Industrial Area, Banglore-560099. Ms.Logini C 6. Representative Senior Network Engineer ---Online--First Advantage Global Operating Centre Pvt. Ltd, From Alumni Whitefield Main Rd, Bengaluru- 560066. Dr. S V Suresh Babu 7. ---Online--Inter Disciplinary Professor & Head Expert Department of Mechanical Engineering Adhiyamaan College of Engineering-Hosur-635109. Mr.P.Muthusamy /AP Faculty 8. Department of Aeronautical Engineering Representative Adhiyamaan College of Engineering-Hosur-635109. r.mg Faculty Mr.T.Anand /AP 9. Department of Aeronautical Engineering Representative Adhiyamaan College of Engineering-Hosur-635109 10. Ms.R. Priyanka /AP Faculty Department of AeronauticalEngineering Representative Adhiyamaan College of Engineering- Hosur-635109

Ofinitimation Boboard of Studies Faculty of Aeronautical Engineering ADHIYAMAAN COLLEGE OF ENGINEERING (Autonomous) Hosur - 635 109, Tamil Nadu.



ADHIYAMAAN COLLEGE OF ENGINEERING (AUTONOMOUS) Affiliated to Anna University, Chennai Dr.M.G.R.Nagar, Hosur-635130

22nd BOARD OF STUDIES MEETING IN FACULTY OF AERONAUTICAL ENGINEERING HELD ON 09/10/2021 (Online)

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	People	Information	
	Nambi Arivudai Meeting host		:
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A	ANANDT	2:	:
	Dean Jones	S.	:
	Dr Babu S - PSGCT	S.	:
	logini aero	S.	:
P	Priya Ragu	S.	:
	S.V.SURESH Babu	c:	:
	V Senthilkumar	S.	:

V Senthilkumar