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1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution:				
Classification / Mapping of Course with their societal needs				
Course code and name	**Local Needs**	**Regional Needs**	**National Needs**	**Global Needs**
B.E - AERO Regulation 2020				
20MA105- Mathematics-I for Mechanical Sciences		✓	✓	✓
20AE101- Fundamentals of Aeronautics	✓		✓	✓
20EC103- Basics of Electrical and Electronics Engineering	✓		✓	✓
20ENE01-Communicative English		✓	✓	✓
20CH103- Chemistry for Mechanical Sciences		✓	✓	✓
20ME101- Engineering Graphics	✓		✓	✓
20MC101- Induction Programme	✓		✓	✓
20MA205- Mathematics – II for Mechanical Sciences		✓	✓	✓
20ME201- Engineering Mechanics		✓	✓	✓
20ENE02- Advanced Communicative English	✓		✓	✓
20PH203- Physics for Mechanical Sciences	✓		✓	✓
20CS201- Problem Solving using Python		✓	✓	✓
20AE201- Aeronautical Engineering Practices Laboratory	✓		✓	✓
20MC201- Environmental Sciences	✓		✓	✓
20MA301-Transforms and Boundary Value Problems	✓		✓	✓
20AE301- Aero Engineering Thermodynamics	✓		✓	✓
20AE302- Engineering Materials and Metallurgy		✓	✓	✓
20AE303- Manufacturing Technology		✓	✓	✓
20AE304- Fluid Mechanics and Machinery for Aeronautical Engineers		✓	✓	✓
20AE305- Strength of Materials for Aeronautical Engineers		✓	✓	✓
20AE306- Applied Thermodynamics Laboratory	✓		✓	✓

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20MC302- Interpersonal Skills	✓		✓	✓
20MA401- Numerical Analysis and Statistics		✓	✓	✓
20AE401-Aircraft Structural Mechanics		✓	✓	✓
20AE402- Aircraft Propulsion	✓		✓	✓
20AE403- Aircraft Systems and Instruments	✓		✓	✓
20AE404- Mechanics of Machinery		✓	✓	✓
20AE405- Aerodynamics	✓		✓	✓
20AE406- Propulsion Laboratory	✓		✓	✓
20AE407- Computer Aided Aircraft Components Drawing Laboratory		✓	✓	✓
20MC401- Soft skill		✓	✓	✓
20AE501 - Flight Dynamics	✓		✓	✓
20AE502 - Rocket and Space Propulsion		✓	✓	✓
20AE503 - Compressible Flow Aerodynamics		✓	✓	✓
20AEE61 - Computer Integrated Manufacturing		✓	✓	✓
20AE504 - Aircraft Structural Analysis		✓	✓	✓
20AE505 - Aero engine & Airframe Laboratory		✓	✓	✓
20AE601 - Finite Element Methods	✓		✓	✓
20AE602 - Composite Materials and Structures		✓	✓	✓
20AE603 - Professional Ethics in Engineering		✓	✓	✓
20AEE47 - Experimental Stress Analysis	✓		✓	✓
20AE604 - UAV Systems	✓		✓	✓

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20AE605 - Analysis and Simulation Laboratory	✓		✓	✓
20AE606 - Mini project	✓		✓	✓
20AE607 - Internship	✓		✓	✓
20AEE01 - Low speed Aerodynamics		✓	✓	✓
20AEE02 - High speed Aerodynamics		✓	✓	✓
20AEE03 - Boundary Layer Theory		✓	✓	✓
20AEE04 - Viscous Flow Theory		✓	✓	✓
20AEE05 - Industrial Aerodynamics		✓	✓	✓
20AEE06 - Aero Acoustics			✓	✓
20AEE07 - Flight Instrumentation		✓	✓	✓
20AEE08 - Air Traffic Control and Planning		✓	✓	✓
20AEE09 - Behavior of Material at High Temperature			✓	✓
20AEE10 - Experimental Aerodynamics	✓		✓	✓
20AEE11 - Helicopter Aerodynamics		✓	✓	✓
20AEE12 - Civil Aviation Requirements		✓	✓	✓
20AEE13 - Aircraft Rules and Regulations	✓		✓	✓
20AEE21 - Space Mechanics	✓		✓	✓
20AEE22 - Cryogenic Engineering		✓	✓	✓
20AEE23 - Heat transfer	✓		✓	✓
20AEE24 - Aircraft Cooling Systems	✓		✓	✓
20AEE25 - Combustion Modeling	✓		✓	✓

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20AEE26 - Micro Propulsion System		✓	✓	✓
20AEE27 - Aero engine control system		✓	✓	✓
20AEE28 - Rockets and Missiles	✓		✓	✓
20AEE29 - High Temperature Gas Dynamics	✓		✓	✓
20AEE30 - Wind Tunnel Techniques		✓	✓	✓
20AEE31 - Missiles Guidance	✓		✓	✓
20AEE32 - High Temperature Materials	✓		✓	✓
20AEE41 - Optimization and its applications	✓		✓	✓
20AEE42 - Fatigue and fracture		✓	✓	✓
20AEE43 - Failure analysis		✓	✓	✓
20AEE44 - Aircraft Structural Testing and Qualification	✓		✓	✓
20AEE45 - Experimental Technology for Aircraft Structures	✓		✓	✓
20AEE46 - Vibration and Rotor dynamics		✓	✓	✓
20AEE47 - Experimental stress analysis	✓		✓	✓
20AEE48 - Aircraft Structural health Monitoring Systems	✓		✓	✓
20AEE49 - Nano Composite Materials	✓		✓	✓
20AEE50 - Hyper mesh		✓	✓	✓
20AEE51 - Helicopter Theory and Maintenance		✓	✓	✓
20AEE52 - Airframe maintenance and repair	✓		✓	✓
20AEE53 - Aero engine maintenance & repair	✓		✓	✓
20AEE54 - Theory of Elasticity		✓	✓	✓

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20AEE55 - Advanced Manufacturing Process	✓		✓	✓
20AEE56 - Design for manufacture and assembly	✓		✓	✓
20AEE57 - Total Quality management	✓		✓	✓
20AEE58 - Production planning and control		✓	✓	✓
20AEE59 - Six sigma and Lean concepts		✓	✓	✓
20AEE60 - Nondestructive testing	✓		✓	✓
20AEE61 - Computer Integrated Manufacturing		✓	✓	✓
20AEO01 - Drone Design and development	✓		✓	✓
20AEO02 - Helicopter Technology	✓		✓	✓
20AEO03 - Air traffic control	✓		✓	✓
20AEO04 - Automobile Aerodynamics		✓	✓	✓
20AEO05 - Avionics		✓	✓	✓
20AEO06 - Aircraft Power Plant	✓		✓	✓
20AEO07 - Basics of Aeronautical Science	✓		✓	✓
20AEO08 - Airport Management		✓	✓	✓
20AEO09 - Rocket and Space Science		✓	✓	✓
20AEO10 - Aircraft Maintenances	✓		✓	✓
20AEA01 - Wind Turbine Design and Testing	✓		✓	✓
20AEA02 - Real Time Industrial Applications in CFD		✓	✓	✓
20AEA03 - Failure Analysis of Advanced Composites		✓	✓	✓
20AEA04 - Technical Documentation for Aerospace Engineering Services	✓		✓	✓

20AEA05 - Introduction to Aerospace Navigation		✓	✓	✓
20AEA06 - Disruptive Innovation Based Startup Activities		✓	✓	✓
B.E AERO Regulation 2017				
GE8077 -Total Quality Management	✓		✓	✓
AE8751 - Avionics	✓		✓	✓
ME8093 -Computational Fluid Dynamics		✓	✓	✓
OML751- Testing of Materials	✓		✓	✓
AE8006 - UAV Systems	✓		✓	✓
AE8009 -Airframe Maintenance and Repair	✓		✓	✓
AE8711 - Aircraft Systems Laboratory		✓	✓	✓
AE8712 - Flight Integration Systems and Control Laboratory		✓	✓	✓
AE8713 - Aircraft Design Project - II	✓		✓	✓
AE8015 - Industrial Aerodynamics	✓		✓	✓
MG8591- Principles of Management		✓	✓	✓
AE8811- Project Work	✓		✓	✓
AE8004 - Helicopter Theory	✓		✓	✓
AE8005 - Aero Engine Maintenance and Repair	✓		✓	✓
AE8006 - UAV Systems	✓		✓	✓
AE8007 - Aircraft Materials		✓	✓	✓
AE8008 - Vibration and Elements of Aeroelasticity		✓	✓	✓
GE8071 - Disaster Management	✓		✓	✓

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AE8009 - Airframe Maintenance and Repair	✓		✓	✓
AE8010 - Fatigue and Fracture	✓		✓	✓
PR8071 - Lean Six Sigma		✓	✓	✓
ME8097 - Non Destructive Testing and Evaluation		✓	✓	✓
GE8074 - Human Rights	✓		✓	✓
AE8011 - Hypersonic Aerodynamics	✓		✓	✓
AE8012 - Wind Tunnel Techniques	✓		✓	✓
AE8013 - Rockets and Missiles		✓	✓	✓
AE8014 - Structural Dynamics		✓	✓	✓
AE8015 - Industrial Aerodynamics	✓		✓	✓
PR8491 - Computer Integrated Manufacturing	✓		✓	✓
AE8016 - Flight Instrumentation	✓		✓	✓
AE8017 - Theory of Elasticity		✓	✓	✓
AE8018 - Air Traffic Control and Planning		✓	✓	✓
MG8591 - Principles of Management	✓		✓	✓
GE8076 - Professional Ethics in Engineering		✓	✓	✓
M.E AERO Regulation 2022				
22PMA101 - Advanced Mathematical Methods	✓		✓	✓
22PAR101 - Advanced Propulsion System	✓		✓	✓
22PAR102 - Theory of Vibrations	✓		✓	✓
22PARE05 - Experimental stress analysis		✓	✓	✓

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22PAR103 - Advanced Aerodynamics		✓	✓	✓
22PAR104 - Advanced Structural Mechanics		✓	✓	✓
22PAR105 - Technical Presentation Seminar		✓	✓	✓
22PAR201 - Advanced UAV Design	✓		✓	✓
22PAR202 - Aircraft Flight Dynamics	✓		✓	✓
22PAR203 - Finite Element Method for Aircraft structure Design	✓		✓	✓
22PAR204 - Computational Fluid Dynamics for Aerodynamics		✓	✓	✓
22PAR205 - Technical Presentation Seminar	✓		✓	✓
22PARE01 - Boundary Layer Theory	✓		✓	✓
22PARE02 - Aircraft Design	✓		✓	✓
22PARE03 - Theory of Elasticity		✓	✓	✓
22PARE04 - Rocketry and Space Mechanics			✓	✓
22PARE05 - Experimental Stress Analysis	✓		✓	✓
22PARE11 - Theory of Plates and Shells	✓		✓	✓
22PARE12 - High Temperature Problems in Structures		✓	✓	✓
22PARE13 - Fatigue and Fracture Mechanics	✓		✓	✓
22PARE14 - Industrial Aerodynamics	✓		✓	✓
22PARE15 - Hypersonic Aerodynamics	✓		✓	✓
22PARE16 - Computational Heat Transfer		✓	✓	✓
22PARE17 - Wind Power Engineering	✓		✓	✓
22PARE18 - Advanced Composite Materials and Structures		✓	✓	✓

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M.E AERO Regulation 2020				
20PAR201 -Advanced UAV Design	✓		✓	✓
20PAR202 - Aircraft Flight Dynamics	✓		✓	✓
20PARE14 – Industrial Aerodynamics	✓		✓	✓
20PARE17 – Wind Power Engineering		✓	✓	✓
20PAR203 - Finite Element Method for Aircraft structure Design		✓	✓	✓
20PAR204 - Computational Fluid Dynamics for Aerodynamics	✓		✓	✓
20PAR205 - Technical Presentation Seminar	✓		✓	✓
20PEE301 - Research Methodology and Intellectual Property Rights	✓		✓	✓
20PAR301 -Project Phase – I	✓		✓	✓
20PAR302 - Internship Training		✓	✓	✓
20PAR401 - Project Phase – II		✓	✓	✓
M.E ISE Regulation 2022				
22PMA105 - Advanced Numerical Methods		✓	✓	✓
22PIS101 -Principles of Safety Management		✓	✓	✓
22PIS102 -Environmental Safety		✓	✓	✓
22PIS103 -Occupational Health and Industrial Hygiene	✓		✓	✓
22PIS104 -Industrial Safety, Health and Environment Acts	✓		✓	✓
22PISE01 -Plant layout and materials handling	✓		✓	✓
22PIS105 -Technical Seminar - I	✓		✓	✓
22PIS201 - Fire Engineering and Explosion Control	✓		✓	✓

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22PIS202 - Computer Aided Hazard Analysis		✓	✓	✓
22PIS203 - Electrical Safety	✓		✓	✓
22PIS204 - Safety in Chemical Industries	✓		✓	✓
22PIS205 - Industrial Safety Laboratory	✓		✓	✓
22PIS206 - Technical Seminar -II		✓	✓	✓
22PISE01 - Plant Layout and Materials Handling	✓		✓	✓
22PISE02 - Work Study and Ergonomics	✓		✓	✓
22PISE03 - Dock Safety	✓		✓	✓
22PISE04 - Human Factors in Engineering		✓	✓	✓
22PISE10 - Transport Safety	✓		✓	✓
22PISE11 - Fireworks Safety	✓		✓	✓
22PISE12 - Safety in Construction		✓	✓	✓
22PISE13 - Nuclear Engineering and Safety	✓		✓	✓
22PISE14 - Safety in Textile Industry	✓		✓	✓
M.E ISE Regulation 2020				
20PIS201 -Fire Engineering and Explosion Control	✓		✓	✓
20PIS202 - Computer Aided Hazard Analysis		✓	✓	✓
20PIS203 -Electrical Safety	✓		✓	✓
20PIS204 -Safety in Chemical Industries	✓		✓	✓
20PIS205 -Industrial Safety Laboratory	✓		✓	✓
20PIS206 -Technical Seminar -II		✓	✓	✓

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20PEE301 -Research Methodology and Intellectual Property Rights	✓		✓	✓
20PIS302 -Project Work Phase – I	✓		✓	✓
20PIS401 -Project Work Phase – II	✓		✓	✓
	Prepared by	**Reviewed by**	**Approved By**	
SIGN				
NAME	Mr.S.R.Arun	Mr.K.Vijay Babu	Dr. S.P. Venkatesan	