

# UNDERGRADUATE CURRICULUM

## First Semester

MATH 101	Calculus I
PHYS 101	Physics I
ME 121	Computer Aided Engineering Design
ENG 101	Academic English I
CARP 101	Career Planning
TURK 101	Turkish I
ETK 101	Engineering Ethics
SOC XXX	Social Elective 1

## Second Semester

MATH 102	Calculus II
MATH 103	Linear Algebra
PHYS 102	Physics II
AEE 102	Engineering Mechanics: Statics
AEE 104	Principles of Aeronautical Engineering
ENG 102	Academic English II
TURK 102	Turkish II

## Third Semester

AEE 201	Engineering Mechanics: Dynamics
AEE 203	Measurement Techniques and Instrumentation
MME 221	Basic Concepts in Materials Science
EEE 221	Fundamentals of Electrical and Electronics Engineering
MATH 201	Probability and Statistics
MATH 203	Differential Equations
HIST 101	Atatürk's Principles and History of Turkish Revolution I
OHS 201	Occupational Health and Safety I



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## Fourth Semester

AEE 202	Fluid Mechanics
AEE 204	Fundamentals of Engineering Thermodynamics
AEE 206	Case Studies on Aviation Accidents: Structural Failure
AEE 208	Modelling and Simulation of Dynamic Systems
CNG 298	Programming for Engineering
HIST 102	Atatürk's Principles and History of Turkish Revolution II
SOC XXX	Social Elective II

## Fifth Semester

AEE 301	Aerodynamics I
AEE 303	Power Generation Cycles and Irreversible Systems
AEE 305	Applied Elasticity
AEE 307	Numerical Methods
AEE 309	Automatic Control Systems
AEE XXX	Technical Elective I
AEE 300	Industrial Summer Practice I

## Sixth Semester

AEE 302	Aerodynamics II
AEE 304	Heat Transfer
AEE 306	Aerospace Structures
AEE 308	Aircraft Performance
AEE 310	Aircraft Propulsion Systems
AEE XXX	Technical Elective II
ENT 101	Entrepreneurship
OHS 202	Occupational Health and Safety II



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## Seventh Semester

AEE 401	Flight Stability and Control
AEE 403	Aerial Vehicle Design
AEE 405	Design of Machine Elements
AEE 407	Mechanical Vibrations
AEE 409	Airworthiness Certification Process
AEE XXX	Technical Elective III
AEE XXX	Technical Elective IV
AEE 400	Industrial Summer Practice II

## Eighth Semester

AEE 402	Industrial Training and Graduation Thesis
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## Technical Elective Courses

AEE 411	Engineering Optimization	AEE 426	Introduction to Optimal Control
AEE 412	Wind Energy	AEE 427	Helicopter Aerodynamics
AEE 413	Modern Control Systems	AEE 428	Aeroelasticity
AEE 414	Hypersonic Flow	AEE 429	Aircraft Engine Design
AEE 415	Fundamentals of Combustion	AEE 430	Theory of Boundary Layer
AEE 416	Avionic Systems	AEE 431	Computer Aided Manufacturing
AEE 417	Experimental Aerodynamics	AEE 432	Automatic Flight Control Systems
AEE 418	Computational Fluid Dynamics	AEE 433	Electric and Nuclear Propulsion
AEE 419	Digital Control	AEE 434	Rocket Design
AEE 420	Aerodynamic Optimization	AEE 435	Space Vehicle Capsule Design
AEE 421	Viscous Flow	AEE 436	Multistage Rockets
AEE 422	Remote Sensing	AEE 437	Theory and Measurement Techniques of Turbomachinery Flows
AEE 423	Radar Systems	AEE 438	Introduction to Energy Conversion
AEE 424	Composite Materials	AEE 439	Advanced Materials and Technologies for Aerospace Applications
AEE 425	Introduction to Artificial Intelligence		



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## Social Electives Courses

SOC 101	Introduction to Business	SOC 111	Basic Photography
SOC 102	Current Topics in Psychology	SOC 112	Personal Development
SOC 103	Guitar I	SOC 113	Creative Thinking Methods and Techniques
SOC 104	Special Topics in Economics, Industry and Development	SOC 114	Correct and Effective Speech
SOC 105	Foreign Languages: Basic French	SOC 115	Speed Reading
SOC 106	Foreign Languages: Basic German	SOC 116	Public Relations
SOC 107	Foreign Languages: Basic Spanish	SOC 117	Business Law and Ethics
SOC 108	History of War	SOC 118	WEB Design
SOC 109	Media Literacy	SOC 119	Entrepreneurship and Business Plan Preparation
SOC 110	Communication Skills	SOC 120	History of Science
		SOC 199	Volunteering Studies

