Total Credit Hours: 128

NAME: _____

ID No.: _____

FRESHMAN YEAR

Course	Credit Hours	Pre-Requisites
CHEM 101 General Chemistry	4	
ENGL 101 Intro. to Acad. Discourse	3	
MATH 101 Calculus I	4	
PHYS 101 General Physics I	4	
IAS 121 Language Foundation	2	
PE 101 Physical Edu. I	1	
ENGL 102 Intro. to Report Writing	3	ENGL 101
ICS 104 Intro. to Prog. In Python & C	3	
MATH 102 Calculus II	4	MATH 101
PHYS 102 General Physics II	4	PHYS 101
IAS 111 Belief & its Consequences	2	

SOPHOMORE YEAR

Course	Credit Hours	Pre-Requisites
CE 202 Statics & Strength of Materials	3	PHYS 101
ENGL 214 Academic and Professional Communication	3	ENGL 102
MATH 201 Calculus III	3	MATH 102
ME 203 Thermodynamics I	3	MATH 102, PHYS 102
ME 210 ME Drawing & Graphics	3	
MSE 201 Materials Science & Eng.	3	CHEM 101, MATH 102
MSE 202 Material Sci. & Eng. Lab	1	
EE 236 EE Principles & Applications	3	MATH 102, PHYS 102
EE 237 EE Principles & Applications Lab	1	
ISE 291 Intro. to Data Science	3	ICS 104, MATH 102
MATH 208 Elements of Differential Equations	3	MATH 102
ME 201 Dynamics	3	CE 202
ME 204 Thermodynamics II	3	ME 203
ME 218 Intro. to ME Design	2	ME 210, PHYS 102

JUNIOR YEAR

Course	Credit Hours	Pre-Requisites
COE 292 Intro. to Artificial Intelligence	3	ISE 291
IAS 212 Professional Ethics	2	IAS 111
STAT 319 Prob. & Stat. for Engineers	3	MATH 102
ME 301 Machine Design I	3	CE 202, ME 218
ME 311 Fluid Mechanics	3	MATH 201, ME 201, ME 203
ME 322 Manufacturing Processes	3	ME 210, ME 216, ME217
ME 323 Manufacturing Lab	1	
BUS 200 Business & Entrepreneurship	3	
CGS 392 Career Essentials	1	
IAS XXX Islamic/Arabic Elective	2	IAS 212
MATH 371 Intro. to Numerical Methods	3	Math 201
ME 302 Machine Design II	3	ME 301
ME 303 Mechanical System Design Lab	1	
ME 315 Heat Transfer	3	ME 204, ME 311
ME 316 Thermo-Fluids Lab	1	

SENIOR YEAR

Course	Credit Hours	Pre-Requisites
ME 398 Internship Training	6	BUS 200, ENGL 214, ME 301, ME 315
ME 411 Senior Design Project I	0	Pre- Req: BUS 200, ME 315
GS XXX General Studies Elective	3	
ME 401 System Dynamics & Control	3	EE 234, EE 235 MATH 208, ME 315
ME 402 Measurements & Control Lab	1	
ME 412 Senior Design Project II	3	
ME 4XX ME Elective I	3	
ME 4XX ME Elective II	3	

KEY

- Pre-Requisites
- Co-Requisites
- Credit Hours
- General Education Requirements
- Core Requirements
- Elective Requirements
- Technical Training

Degree Plan Chart for Applied Mechanical Engineering (New-AME) Revised January 2025