

Mechanical Engineering 2026/2027 (128 Hours) Academic Checksheet

Student A#				Student Name (Last, First)		Offered: F=Fall S=Spr M=Sum
Semester, Transfer or AP	Grade	Course Number	Cr Hrs	Course Title	Prerequisites, Corequisites and/or Prerequisites with Concurrency	
English - 6 hours						
		EH 101	3	College Writing I	Placement	FSM*
		EH 102	3	College Writing II	EH 101	FSM*
Mathematics - 18 hours						
		MA 171	4	Calculus I	MA 113 or Level III Placement	FSM*
		MA 172	4	Calculus II	MA 171 or MA 151	FSM*
		MA 201	4	Calculus III	MA 172	FSM*
		MA 238	3	Applied Differential Equations	Prereq w/Con: MA 201	FSM*
		MA 244	3	Introduction to Linear Algebra	MA 172	FSM*
Chemistry - 4 hours						
		CH 121	3	General Chemistry I	Plcmt or Prereq w/Con: MA 113 or higher, CH 125	FSM*
		CH 125	1	General Chemistry Lab I	Prereq w/Con: CH 121	FSM*
Physics - 8 hours						
		PH 111	3	General Physics w/Calculus I	MA 171 or MA 151; Coreq: 114	FSM*
		PH 114	1	General Physics Lab I	Prereq w/Con: PH 111	FSM*
		PH 112	3	General Physics w/Calculus II	MA 172, PH 111, PH 114; Coreq: 115	FSM*
		PH 115	1	General Physics Lab II	Coreq: PH 112	FSM*
Science Elective - 3 hours						
			3		BYS 119, CH 123, PH 113, or 300/400 MA course	FSM*
History, Social & Behavioral Sciences, Humanities & Fine Arts - 18 hours						
			3	History	For more information on HSBS/HFA Requirements: http://www.uah.edu/eng/departments/undergraduate-engineering/student-forms	FSM*
			3	Literature		FSM*
			3	Fine Art		FSM*
			3	Social & Behavioral Science		FSM*
			3	Sequence Course (HY or EH)		FSM*
			3	HSBS/HFA		FSM*
Engineering - 4 hours						
		FYE 101	1	Charger Success: Engineering	None	F
		EGR 101	3	Computing for Engineers	Prereq w/Con: MA 113 or MA 151	FSM*
		EGR 299	0	Engineering Mentoring I	EGR 101, Prereq w/Con: MA 201	FS
		EGR 399	0	Engineering Mentoring II	EGR 299, MAE 272	FS
**	Class has required lab section					
Mechanical Engineering - 58 hours						
		MAE 211	2	Introduction to Computational Tools	EGR 101, MA 171 or MA 151	FSM*
		EE 213	3	Electrical Circuit Analysis I	Prereq w/Con: PH 112, MA 238	FSM*
		MAE 271	3	Statics	EGR 101, PH 111; Prereq w/Con: MA 201	FSM*
		MAE 272	3	Dynamics	MA 201, MAE/CE 271	FSM*
**		MAE 284	3	Numerical Methods	MA 244; Prereq w/Con: MAE 211, MA 238; Coreq: MAE 284L	FSM*
		ISE 321	3	Engineering Economy	EGR 101	FSM*
		MAE 310	3	Fluid Mechanics I	MA 238, MAE/CE 271	FSM*
**		MAE 311	3	Principles of Measurement & Instrumentation	Coreq MAE 311L; Prereq w/ Con: EE 213, MAE 284	FSM*
		MAE 341	3	Thermodynamics I	CH 121, PH 112, MA 201	FSM*
		MAE 342	3	Thermodynamics II	MA 238, MAE 341	FSM*
**		MAE 364	3	Kinematics & Dynamics of Machines	MAE 211, MAE 272, MAE 284; Coreq MAE 364L	FS
		MAE 370	3	Mechanics of Materials	MAE/CE 271, MA 244, (MAE 211, CE 211, or CPE 211); Coreq: MAE 375	FSM*
		MAE 375	1	Mechanics of Materials Lab	Coreq: MAE 370	FSM*
		MAE 378	3	Materials & Manufacturing Processes	MAE/CE 370	FSM*
		MAE 450	3	Intro to Heat and Mass Transfer	MAE 284, MAE 311, MAE 341, (MAE 310 or MAE 330); Coreq: MAE 451	FS
		MAE 451	1	Heat and Mass Transfer Lab	Coreq: MAE 450	FS
Select One		MAE 455	3	Design of Thermal Systems	MAE 342, MAE 450	FS
		MAE 466	3	Mechanics & Design of Machine Elements	MAE 364, MAE/CE 370	F
		MAE 488	3	Analysis of Engineering Systems+	EE 213, MAE/CE 272, MAE 284	FSM*
		MAE 489	3	Computer-Aided Engineering Analysis	MAE/CE 370; Prereq w/Con: MAE 284	FSM*
		MAE 490	3	Senior Design I	ISE 321, MAE 310, MAE 311, MAE 341, MAE 375, MAE 378, EGR 399	FS
		MAE 491	3	Senior Design II	Corresponding MAE 490 Section	FS
Technical Elective - 9 hours						
			3		300+ Level course: list of approved Technical Electives at http://www.uah.edu/eng/departments/undergraduate-engineering/student-forms	
			3			
			3			

All prerequisite classes must be completed with a "C-" or higher grade.

+MAE 488 must be completed with a C- or better

The Catalog is the final authority for all degree requirements.

Note: No ET courses may be used to satisfy degree requirements.

*Summer class offerings are subject to instructor availability