

Mechanical Engineering Course Planning Sheet 2017/2018

The first two-year plan below is one that will work, though others are possible depending on AP credits, transfer credits, etc.

Autumn			Winter			Spring		
<input type="checkbox"/>	ENGL Comp - Admission Prereq	5	<input type="checkbox"/>	VLPA/I&S	5	<input type="checkbox"/>	VLPA/I&S	5
<input type="checkbox"/>	MATH 124 - Admission Prereq	5	<input type="checkbox"/>	MATH 125 - Admission Prereq	5	<input type="checkbox"/>	MATH 126 - Admission Prereq	5
<input type="checkbox"/>	CHEM 142 - Upper Div Adm Prereq	5	<input type="checkbox"/>	CHEM 152 - Upper Div Adm Prereq	5	<input type="checkbox"/>	PHYS 121 - Upper Div Adm Prereq	5
<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>		
Total 15			Total 15			Total 15		

Autumn		Winter		Spring				
	Cr		Cr		Cr			
<input type="checkbox"/>	AA 210 - Upper Div Adm Prereq	4	<input type="checkbox"/>	ME 230 - Upper Div Adm Prereq	4	<input type="checkbox"/>	CEE 220 - Upper Div Adm Prereq	4
<input type="checkbox"/>	PHYS 122 - Upper Div Adm Prereq	5	<input type="checkbox"/>	PHYS 123 - highly recommended	5	<input type="checkbox"/>	AMATH 301	4
<input type="checkbox"/>	MATH 307 or AMATH 351	3	<input type="checkbox"/>	MATH 308 or AMATH 352	3	<input type="checkbox"/>	ENGR 231	3
<input type="checkbox"/>	VLPA/I&S	3	<input type="checkbox"/>	VLPA/I&S	2	<input type="checkbox"/>	ME 123	4
Total 15		Total 14		Total 15				

**300-level course prerequisites: These courses are high priority because not having them can delay 300-level course sequences. Some may be taken Autumn of junior year:

<input type="checkbox"/>	ME 123	4	<input type="checkbox"/>	MATH 307 or AMATH 351	3
<input type="checkbox"/>	MSE 170	4	<input type="checkbox"/>	MATH 308 or AMATH 352	3
<input type="checkbox"/>	*EE 215	4	<input type="checkbox"/>	AMATH 301	4
<input type="checkbox"/>	IND E 315 or MATH 390 or STAT 390	3			

*EE 215 must be completed by Aut of Jr year if interested in Mechatronics Option

These required courses may be taken anytime:

<input type="checkbox"/>	MATH 309 or 324 or AMATH 353	
<input type="checkbox"/>	ENGR 231	
<input type="checkbox"/>	VLPA (10 cr) <input type="checkbox"/> I&S (10 cr)	
<input type="checkbox"/>	Areas of Knowl (VLPA or I&S) (4 cr)	
<input type="checkbox"/>	Diversity (3 cr/take with VLPA or I&S)	

Choose junior year courses below for which you have the prerequisites. Fill in Aut Qtr with unfinished 300-level course prereqs from above.

Autumn	Prereqs/Notes	Cr	Winter	Prereqs/Notes	Cr	Spring	Prereqs/Notes	Cr			
<input type="checkbox"/>	ME 323	M126, P121, CH142	4	<input type="checkbox"/>	ME 323	MATH 126, PHY 121, CH 142	4	<input type="checkbox"/>	ME 355	MSE 170, ME 354	4
<input type="checkbox"/>	ME 354	MSE 170	5	<input type="checkbox"/>	ME 333	AMATH 301, M 307, ME 323	5	<input type="checkbox"/>	ME 356	MSE 170, ME 354	4
<input type="checkbox"/>		**300-level prereq		<input type="checkbox"/>	ME 354	MSE 170	5	<input type="checkbox"/>	ME 331	ME 333 & its prereq's	5
<input type="checkbox"/>		**300-level prereq		<input type="checkbox"/>	ME 373	M 307, 308, EE 215	5	<input type="checkbox"/>	ME 374	AMATH 301, ME 373	5
<input type="checkbox"/>		**300-level prereq		<input type="checkbox"/>				<input type="checkbox"/>	ME 333	AMATH 301, M 307, ME 323	5
<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>	ME 395	IND E 315, ME 123, 323	4

Choose any remaining 300-level courses, ME 395 and 495, and 19 credits of 400-level courses for ME Options. May use engr 300/400 level courses with approved petition; internship credits - 4 max; ME 499 - 6 cr max. Always check the time schedule for additional 400-level courses.

Autumn	Prereqs/Notes	Cr	Winter	Prereqs/Notes	Cr	Spring	Prereqs/Notes	Cr			
<input type="checkbox"/>	ME 331	ME 333	5	<input type="checkbox"/>	ME 355	ME 354	4	<input type="checkbox"/>	ME 355	ME 354	4
<input type="checkbox"/>	ME 354	MSE 170	5	<input type="checkbox"/>	ME 356	ME 354	4	<input type="checkbox"/>	ME 356	ME 354	4
<input type="checkbox"/>	ME 395	IND E 315, ME 123, 323	4	<input type="checkbox"/>	ME 373	M 307, 308, EE 215	5	<input type="checkbox"/>	ME 374	ME 373	5
<input type="checkbox"/>	ME 410		3	<input type="checkbox"/>	ME 416	ME 414, for Innov in Med	3	<input type="checkbox"/>	ME 495	ME 395	4
<input type="checkbox"/>	ME 411		3	<input type="checkbox"/>	ME 442		4	<input type="checkbox"/>	ME 406	ME 355 (concurrent)	3
<input type="checkbox"/>	ME 414		3	<input type="checkbox"/>	ME 450		3	<input type="checkbox"/>	ME 415		3
<input type="checkbox"/>	ME 430	ME 323	4	<input type="checkbox"/>	ME 477	ME 374, for Mechatronics	4	<input type="checkbox"/>	ME 425	ME 323, 331	4
<input type="checkbox"/>	ME 431	ME 333	4	<input type="checkbox"/>	ME 494	ME 471, 473 for Mechatronics	1	<input type="checkbox"/>	ME 426	ME 333	3
<input type="checkbox"/>	ME 460		3	<input type="checkbox"/>	ME 498	Biomechanics of Movement	3	<input type="checkbox"/>	ME 440	ME 354	3
<input type="checkbox"/>	ME 461		3	<input type="checkbox"/>	ME 498	Adv Additive Manufacturing	4	<input type="checkbox"/>	ME 445		4
<input type="checkbox"/>	ME 471	ME 374, for Mechatronics	4	<input type="checkbox"/>	ME 498	Leadership Seminar	1	<input type="checkbox"/>	ME 478	for Mechatronics	4
<input type="checkbox"/>	ME 473	ME 374, for Mechatronics	4	<input type="checkbox"/>	ME 499		var	<input type="checkbox"/>	ME 480	for Mechatronics	4
<input type="checkbox"/>	ME 478	Math 308, ME 123, 374	4					<input type="checkbox"/>	ME 481	ME 323	4
<input type="checkbox"/>	ME 480		4					<input type="checkbox"/>	ME 498		var
<input type="checkbox"/>	ME 498	Boeing Mfr (?)	3					<input type="checkbox"/>	ME 499		var
<input type="checkbox"/>	ME 498	Biothermal	3								
<input type="checkbox"/>	ME 498	Wave Prop in Des Mat	3								
<input type="checkbox"/>	ME 499		var								

All 300-level courses and ME 495 are required, plus 19 crs of ME Options (ME 400-level; engr 300/400 level courses w/petition, 3 cr max; internship credits - 4 max; ME 499 - 6 cr max)

Mechanical Engineering Course Planning Sheet

Upper Division Admission Prerequisites

<input type="checkbox"/>	ENG Comp
<input type="checkbox"/>	MATH 124, Calc 1
<input type="checkbox"/>	MATH 125, Calc 2
<input type="checkbox"/>	MATH 126, Calc 3
<input type="checkbox"/>	PHYS 121, Mechanics
<input type="checkbox"/>	PHYS 122, Electromagnetism
<input type="checkbox"/>	PHYS 123, Waves (recommended)
<input type="checkbox"/>	CHEM 142, Chem 1
<input type="checkbox"/>	CHEM 152, Chem 2
<input type="checkbox"/>	A A 210, Statics
<input type="checkbox"/>	CEE 220, Mechanics of Materials
<input type="checkbox"/>	ME 230, Dynamics

Freshman-Year Courses

Autumn

Winter

Spring

Sophomore-Year Courses

Autumn

Winter

Spring

300-Level Course Prerequisites

<input type="checkbox"/>	ME 123, Visualizations and CAD
<input type="checkbox"/>	MSE 170, Intro Mechanics of Materials
<input type="checkbox"/>	*EE 215, Intro Circuits
<input type="checkbox"/>	IND E 315 or MATH/STAT 390, Stat for Engrs
<input type="checkbox"/>	MATH 307 or AMATH 351, Dif EQ
<input type="checkbox"/>	MATH 308 or AMATH 352, Lin Algebra
<input type="checkbox"/>	AMATH 301, Scientific Computing

*EE 215 must be completed by Aut of Jr year if interested in Mechatronics Option

Other Required Courses

<input type="checkbox"/>	MATH 309 or 324 or AMATH 353
<input type="checkbox"/>	ENGR 231, Technical Communications
<input type="checkbox"/>	VLPA (10 cr) <input type="checkbox"/> I&S (10 cr)
<input type="checkbox"/>	Areas of Knowl (VLPA or I&S) (4 cr)
<input type="checkbox"/>	Diversity (3 cr/take with VLPA or I&S)

Junior-Year Courses (300-Level)

Autumn

ME 323 - Thermodynamics (4)

** take 300-level prereq

** take 300-level prereq

** take 300-level prereq

Winter

ME 333 - Fluids (5)

ME 354 - Mech of Mats (5)

ME 373 - Intro System Des (5)

Spring

ME 355 - Intro to Manufac (4)

ME 356 - Machine Design (4)

ME 331 - Heat Transfer (5)

ME 374 - Sys Dyn Anal Des (5)

Senior-Year Courses

Autumn

ME 395 - Design Sequence

ME 4XX - ME Option

ME 4XX - ME Option

Winter

ME 4XX - ME Option

ME 4XX - ME Option

Spring

ME 495 - Design Sequence

ME 4XX - ME Option

ME 4XX - ME Option

ME 300-Level (Junior) Courses

<input type="checkbox"/>	ME 323 Thermo (4)
<input type="checkbox"/>	ME 331 Heat Transfer (5)
<input type="checkbox"/>	ME 333 Fluids (5)
<input type="checkbox"/>	ME 354 Mechanics of Materials (5)
<input type="checkbox"/>	ME 355 Intro to Manufacturing (4)
<input type="checkbox"/>	ME 356 Machine Design (4)
<input type="checkbox"/>	ME 373 Intro System Dyn (5)
<input type="checkbox"/>	ME 374 Sys Dyn Anal/Des (5)

ME Design Sequence

<input type="checkbox"/>	ME 395 Intro Mech Engr Design
<input type="checkbox"/>	ME 495 Mech Engr Design

ME Electives/Option Credits - 19 Credits

ME 400-level courses (except 495)

ME 499 (6 credits maximum)

Also allowed: 300/400-level courses from other engineering departments (with petition, 3 cr maximum)

Also allowed: Internship credits (4 credits maximum)