

First year				Sophomore year			
FALL		SPRING		FALL		SPRING	
<b>ENGL 101</b> (English 1) Pre-req: see catalog	3	<b>ENGL 102</b> (English 2) Pre-req: ENGL 101 with 'C' or better	3	<b>COMM 111</b> (Public Speaking) Pre-req: see catalog	3	<b>General Education*</b> H/FA/S&BS see catalog & Degree Audit Must be from an approved list	3
<b>MATH 242</b> (Calculus 1) Pre-req: see catalog with 'C' or better	5	<b>MATH 243</b> (Calculus II) Pre-req: MATH 242 with 'C' or better	5	<b>MATH 344</b> (Calculus 3) Pre-req: MATH 243 with 'C' or better	3	<b>MATH 555</b> (Differential Equations) Pre-req: MATH 243 with 'C' or better	3
<b>CHEM 211 &amp; L</b> (General Chemistry 1) co-req: see catalog	5	<b>PHYS 313</b> (Physics for Scientists I) Co-req: MATH 243 with 'C' or better	4	<b>PHYS 314</b> (Physics for Scientists II) Pre-req: MATH 243, PHYS 313 with 'C' or better	4	<b>ME 398</b> (Thermodynamics 1) Pre-req: MATH 243 and PHYS 313 with 'C' or better	3
<b>IME 222</b> (Engineering Graphics) Pre-req: MATH 123 or equivalent with 'C' or better	2	<b>PHYS 315</b> (Physics I Lab) Pre-req: MATH 242 Co-req: PHYS 313 with 'C' or better	1	<b>ME 250</b> (Materials Engineering) Pre-req: CHEM 211 and MATH 242 with 'C' or better	3	<b>ME 325</b> (Numerical Methods) Pre-req: MATH 243 and PHYS 313 with 'C' or better	3
<b>IME 222 L</b> (Engineering Graphics Lab) Pre-req: MATH 123 or equivalent with 'C' or better/Co-re: IME 222	1	<b>General Education*</b> H/FA/S&BS/FYS see catalog & Degree Audit Must be from an approved list	3	<b>ME 251</b> (Materials Engineering Lab) Co-req: ME 250 with 'C' or better	1	<b>AE 333</b> (Mechanics of Materials) Pre-req: AE 223 Pre or co-req: MATH 344 with 'C' or better	3
		<b>Engineer +</b> requirement 1of 3** See webpage & the list of approved courses or activities		<b>AE 223</b> (Statics) Pre-req: PHYS 313 Co-req: MATH 243 with 'C' or better	3	<b>ME 335</b> (Dynamics for ME Engineers) Pre-req: AE 223 and MATH 344 with 'C' or better	3
	16		16		17		18
Junior year				Senior year			
FALL		SPRING		FALL		SPRING	
<b>PHIL 385</b> (Engineering Ethics) Juniors or Seniors only	3	<b>General Education*</b> H/FA/S&BS see catalog & Degree Audit Must be from an approved list	3	<b>Natural Science/ GenEd</b> see catalog & Degree Audit. Must be from an approved list	3	<b>Mechanical Elective*</b> Pre-req: see catalog & advisor	3
<b>ECE 282 &amp; L</b> (Circuits 1) Pre or co-req: MATH 243 with 'C' or better	4	<b>ME 475</b> (Integrated Design & Mfg) Pre-req: ME 250, ME 251, AE 333 with 'C' or better Pre or co-req ME 439	3	<b>ME 541</b> (Mech Engineering Design II) Pre-req: ME 339, ME 439. Pre or Co-req: ME 475 with 'C' or better	3	<b>ME 659</b> (Mechanical Control Systems) Pre-req: ECE 282 and MATH 555 OR ECE 383 with 'C' or better	3
<b>ME 339</b> (Design of Machinery) Pre-req: IME 222 & ME335 with 'C' or better	3	<b>ME 522</b> (Heat Transfer) Pre-req: ME 325, ME 521 and PHYS 314 with 'C' or better	3	<b>ME 625</b> (Application in Thermal Eng) Pre-req: ME 521, ME 522 Pre or Co-req: ME 533 with 'C' or better	3	<b>ME 633 &amp; L</b> (ME Systems Lab) Pre-req: ME 522 and ME 533 with 'C' or better	3
<b>ME 521 &amp; L</b> (Fluid Mechanics) Pre-req: ME 398, MATH 555, ME 335 with 'C' or better	3	<b>ME 533 &amp; L</b> (ME Lab) Pre-req: AE 333, ECE 282, ME 325, ENGL 102, COMM 111, PHYS 315 Pre or co-req: ME 522 with 'C' or better	3	<b>Thermal Design Elec*</b> Pre-req: see catalog & advisor	3	<b>ME 662</b> (Senior Capstone Design) Pre-Req: ME 541, ME 522 With 'C' or better Pre or Co-req: ME 633, ME 659 <b>(LAST SEMESTER ONLY)</b>	3
<b>ME 439</b> (ME Design 1) Pre-req: ME 250, ME 251, AE 333, MATH 555 with 'C' or better	3	<b>Technical Open Elective*</b> Pre-req: see catalog & advisor	3	<b>Mech Design Elective*</b> Pre-req: see catalog & advisor	3		
<b>Engineer +</b> requirement 2of 3** See webpage & the list of approved courses/ activities		<b>Thermal Elective*</b> Pre-req: see catalog & advisor	3	<b>Engineer +</b> requirement 3of 3** See webpage & the list of approved courses/activities			
	16		18		15		12

**Notes: please read the following notes carefully!**

Check all degree/grade/graduation/ pre-req & co-req requirements with your course catalog term requirements and degree work audit.

All major courses and pre-requisite courses **need a "C" or better**. Review your catalog term/ degree/graduation requirement before enrolling in a class.

**Pre-req** means the course must be taken as a prior condition for enrolling in the next course. For pre-req courses the grade requirement is a "C" or better.

**Co-req** means the course must be taken simultaneously with the other course listed as a co-requisite.

**Pre-req with CC** (Pre or Co-req) means the course can be completed as a pre-req, before taking the listed course, OR it can also be taken at the same time with the other course listed

\* **GenEd and Elective** Courses must be from an approved list. Must check with advisor and degree audit. Check catalog requirement

\*\***ENG+** activities need Chair's pre-approval, and course must be from an approved list ([wichita.edu/engr+](http://wichita.edu/engr+))

GenEd (21 crd hrs). Check your catalog term, degree work audit, and with your advisor

Math & NS (33 crd hrs). Check your catalog term, degree work audit, and with your advisor

Major and Electives (73 crd hrs). Check your catalog term, degree work audit, and with your advisor

E + (0-3 crd hrs options). Check your catalog term, degree work audit, and with your advisor

Total 128 crd hrs for student with catalog term of fall 2018 and after.

**Note:** This check sheet is the same as the ME check sheet of Fall '20 and after (except 1 change in pre-req requirements of ME339. Previously ME335 was a co-req, now it's a pre-req for ME339).