

Mechanical Engineering Guidesheet

GENERAL ED REQUIREMENTS	
A. Human Clture, Physical/Nat World	
Natural Sciences**	
CHEM A111	
PHYS A211	
PHYS A212	
History of Civilization	
HIST A101 or A102	
Two Social/Behavioral Sciences* (2 areas)	
Three Humanities Courses* (at least 2 areas)	
PHIL A325	
B. Intellectual and Practical Skills	
ENGL A101**	
ENGL A102**	
COMM A241	
Mathematics**	
MATH A141	
MATH A142	
C. Personal and Social Responsibility	
Americal Political Institutions (API)	
POLI A201, HIST A201 or A202	
Inter-Curricular Enrichment Program (ICE)	
Two approved events in each semester of enrollment	
For more information, see ICE Program requirements	
Three Writing Intensive Courses	
(At least one in major) List:	
One 3-Credit Non-Western Wold Studies Course*	
List Course:	
Satisfactory Completion of Writing Portfolio	
Submitted after 60 hrs, before applying for graduation	
or ENGL 201	

MAJOR REQUIREMENTS**	
CORE COURSES	
ENCP A101	
ENCP A102	
ENCP A200	
ENCP A260	
ENCP A290	
ENCP A300	
ENCP A301	
ENCP A310	
ENCP A327	
ENCP A332	
ENCP A354	
ENCP A354L	
ENCP A360	
ENCP A361	
ENCP A361L	
ENCP A368	
ENCP A371	
ENCP A377	
ELCT A221	
CSCI A125	
MATH A241	
MATH A242	
MATH A344	
ENGL A462	
TECHNICAL ELECTIVES	
Any ENCP course (A300 or higher not required by major), any CSCI course (145 or higher not required by major), any MATH course (300 or higher not required by major), STAT 509, or any department approved course.	
CAPSTONE	
ENCP A498	
ENCP A499	

*See next page for list of qualifying courses for listed categories and for information on ICE events.

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HUMANITIES COURSES

bolded numbers indicate that course also qualifies as a Non-Western

Art History (ARTH): A105, A106, A206, A312, A335, **A397**, A398

Communications (COMM): A351, A352, A353, A355, A358, **A450**, A455, A462

English (ENGL): A281, A282, A283, A284, A285, A286, A288, A289, A290, **A291**, A293, A295, A301, A362, **A385**, A389, A390, A391, A392, A393, A394, A395, A401, A405, A407, A411, A412, A415, A416, A417, A419, A423, A424, A425, A426, A427, A428, A429, A430, A431, **A435**, A449, A474, A480, A491, A494

Foreign Languages, Literatures & Culture:

(FREN): A302, **A303**, A305, **A306**, **A308**, A388, A397, A398, A399

(GERM): A303, A305, A395, A397, A398, A399

(SPAN): **A303**, A307, A319, **A320**, **A321**, A340, **A380**, **A388**, **A397**, A399, **A426**, **A488**, A498

History (HIST): All history courses. **NOTE:** If HIST A101 or HIST A102 is used towards History of Civilization requirement, the same course cannot count for the Humanities requirement. Also, if HIST A201 or HIST A202 is used towards the American Political Institutions requirement, the same course cannot count for the Humanities requirement.

Honors (HONS): A101

Humanities (HSSI): A107, A201, A202, A211, A301

Music (MUSC): A173, **A175**, A371, A372, A373, A374, A393

Philosophy (PHIL): A102, A211, A302, A303, A304, A311, A312, A350, A390, A399

Religion (RELG): A101, **A103**, A301, A302, A390, A399

Theater (THEA): A161, A361, A362, A363

SOCIAL AND BEHAVIORAL SCIENCES COURSES

Any of the following disciplines:

Psychology (PSYC)

Sociology (SOCY) (see below for non-western courses)

Anthropology (ANTH) (see below for non-western courses)

Political Science (POLI) (see below for non-western courses)

Geography (GEOG) (see below for non-western courses)

Honors (HONS): 101

NON-WESTERN qualifying courses

Art History (ARTH): A397

Anthropology (ANTH): A102, A315, A352, A490

Communications (COMM): A450

English (ENGL): A291, A385, A396, A435, A497

Foreign Languages, Literatures & Culture:

(FREN): A303, A306, A388

(SPAN): A303, A320, A321, A380, A388, A397, A426, A488

History (HIST): A330, A345, A346, A361, A362, A366, A448, A492

Music (MUSC): A175

Political Science (POLI): A122, A123, A330, A344, A483, A487, A492

Religion (RELG): A103

Sociology (SOCY): A410

INTER-CURRICULAR ENRICHMENT (ICE)

Undergraduate students will attend at least 2 ICE events per academic semester up to a total of 16 over their 4-year college career. Freshman Convocation will constitute the first ICE event for entering freshman.

Transfer students will complete 2 ICE events for each academic semester remaining before graduation.

Part-time students will complete 2 ICE events for every 15 hours of completed course credit.

MECHANICAL ENGINEERING CURRICULUM SHEET

FRESHMAN (34)

FALL			SPRING		
ENCP A101	Introduction to Engineering I	3	ENCP A102	Introduction to Engineering II	3
CHEM A111	General Chemistry I & Lab	4	CSCI A125	Intro to Computer Science	3
ENGL A101	Critical Reading & Comp.	3	ENGL A102	Rhetoric & Composition	3
MATH A141	Calculus I	4	MATH A142	Calculus II	4
GEN ED	Humanities	3	ENCP A301	Intro to Numerical Methods	3
			ENCP A300	Engineering Seminar	1
		17			17

SOPHOMORE (34)

FALL			SPRING		
ENCP A200	Statics	3	ENCP A290	Thermodynamics Fund.	3
MATH A344	Linear Algebra for CS & Engr	3	ENCP A260	Intro. to Mechanics of Solids	3
MATH A241	Vector Calculus	4	MATH A242	Elem. Differential Equations	4
PHYS A211	Essentials of Physics I & lab	4	PHYS A212	Essentials of Physics II & lab	4
COMM A241	Public Speaking	3	ENGL A462	Technical Writing	3
		17			17

JUNIOR (32)

FALL			SPRING		
ENCP A361	Instrumentation, Meas, Stats	3	ENCP A327	Design of Mech. Elements	3
ENCP A361L	Instrumentation, Meas, Stats Lab	1	ENCP A377	Manufacturing Processes	3
ENCP A371	Engineering Materials	3	ENCP A310	Dynamics	3
ENCP A360	Fluids	3	ENCP A354	Heat Transfer	3
ELCT A221	Circuits	3	ENCP A354L	Heat Transfer Lab	1
GEN ED	History	3	ENCP A300	Engineering Seminar	1
			PHIL A325	Engineering Ethics	3
		16			17

SENIOR (30)

FALL			SPRING		
ENCP A498	Senior Capstone I	3	ENCP A499	Senior Capstone II	3
ENCP A368	Mechatronics	3	TECH ELEC	Technical Elective	3
ENCP A332	Kinematics	3	GEN ED	Humanities	3
TECH ELEC	Technical Elective	3	GEN ED	API	3
GEN ED	Soc/Behav	3	GEN ED	Soc/Behav	3
		15			15

ADDITIONAL REQUIREMENTS

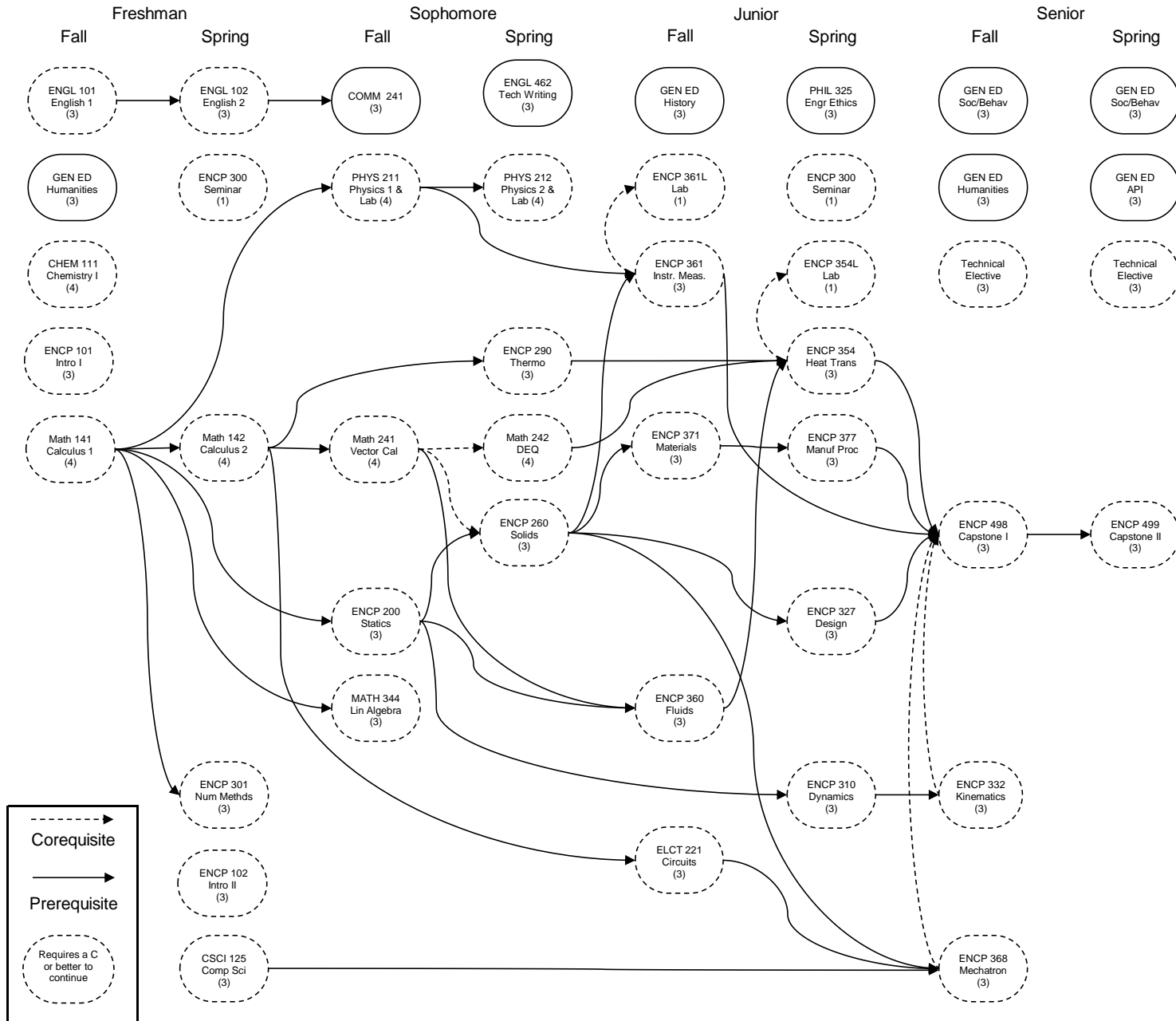
Three Writing Intensive Courses (at least one in major)
 One 3-Credit Non-Western World Studies Course
 Satisfactory Completion of Writing Portfolio (or ENGL 201)

TECHNICAL ELECTIVES

Any ENCP course (A300 or higher not required by major), any CSCI course (145 or higher not required by major), any MATH course (300 or higher not required by major), STAT 509, or any department approved course.

Mechanical Engineering Curriculum 2022

MATH 141 Placement Pre-/Co-Requisite Flowchart



Updated: 3/28/22 BSF