

Engineering Science Undergraduate Course Schedule

Summer Term (2187)

Required Courses						
Subj./Catlg#	Class #	Course	Units	Days	Time	Room
ECE 0257	15894	Analysis & Design of Electronic Circuits	3	TuTh	12:30-2:15p	157 Benedum
ECE 1212	11877	Electronic Circuit Design Lab	3	Tu	9:00-11:50a	1223A Benedum
	11876	<i>Laboratory</i>		Th	9:00-11:50a	1223A Benedum
PHYS 0219	10359	Basic Lab Physical Science & Engineering (6 wk 2)	2	MW	12:00-12:50p	343 Alumni
	10360	<i>Laboratory (6 wk 2)</i>		MW	1:00-3:50p	408 OEH
MEMS0051	13887	Introduction to Thermodynamics	3	M	4:00-6:30p	309 Benedum
ENGSCI 1801	17046	Engineering Design 1	3	Appt.	TBA	
ENGSCI 1802	17045	Engineering Design 2	3	Appt.	TBA	
Electives						
ENGR 1090†	19469	Engr. Cooperative Program	1	<i>please see co-op office for permission #</i>		

† Department Consent Required

Engineering Mechanics Undergraduate Course Schedule

Summer Term (2187)

Required Courses						
Subj./Catlg#	Class #	Course	Units	Days	Time	Room
ENGR0135	11863	Statics & Mechanics of Materials 1	3	Th	4:00-6:30p	227 Benedum
ENGR0145	11864	Statics & Mechanics of Materials 2	3	Th	4:00-6:30p	318 Benedum
MATH 1550	10601	Vector Analysis and Applications (6 wk 1)	3	MTuWTh	6:00-7:45p	627 Thackeray
MEMS 0031	13888	Electrical Circuits	3	Tu	4:00-6:30pm	320 Benedum
MEMS0051	13887	Introduction to Thermodynamics	3	M	4:00-6:30p	309 Benedum
MEMS 1015	15002	Rigid-Body Dynamics	3	W	4:00-6:30p	318 Benedum
STAT 1000	10549	Applied Statistical Methods (6 wk 1)	4	MTuWTh	2:00-3:25p	203 Lawrence
	15886	<i>recitation</i>		MW	12:00-12:50p	203 Lawrence
	10653	<i>recitation</i>		MW	1:00-1:50p	203 Lawrence
	10468	Applied Statistical Methods (6 wk 2)	4	MTuWTh	12:00-1:25p	203 Lawrence
	16782	<i>recitation</i>		MW	11:00-11:50a	203 Lawrence
	19006	<i>recitation</i>		MW	10:00-10:50a	203 Lawrence
ENGSCI 1801	17046	Engineering Design 1	3	Appt.	TBA	
ENGSCI 1802	17045	Engineering Design 2	3	Appt.	TBA	
Electives						
CEE 1341	17421	Steel Structures 1	3	TuTh	6:30-8:10p	319 Benedum
CEE 1401	19632	Open Channel Hydraulics	3	TuTh	4:30-6:10p	319 Benedum
CEE 1821	11798	Foundation Engineering	3	TuTh	11:00a-12:40p	319 Benedum
MEMS 1052	15003	Heat and Mass Transfer	3	Tu	6:30-9:00p	320 Benedum
ENGR 1090 [†]	19469	Engr. Cooperative Program	1	<i>please see co-op office for permission #</i>		

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Engineering Science Nanotechnology (Physics/Materials)

Undergraduate Course Schedule

Summer Term (2187)

Required Courses						
Subj./Catlg#	Class #	Course	Units	Days	Time	Room
ENGR0020	11817	Probability & Statistics	4	MW	2:30-4:25p	1044 Benedum
	11818	<i>recitation</i>	0	F	8:30-10:25a	1044 Benedum
	11816	<i>recitation</i>	0	F	11:00-12:55p	1044 Benedum
ECE 0257	15894	Analysis & Design of Electronic Circuits	3	TuTh	12:30-2:15p	157 Benedum
ENGR0135	11863	Statics & Mechanics of Materials 1	3	Th	4:00-6:30p	227 Benedum
MEMS0051	13887	Introduction to Thermodynamics	3	M	4:00-6:30p	309 Benedum
ENGSCI 1801	17046	Engineering Design 1	3	Appt.	TBA	
ENGSCI 1802	17045	Engineering Design 2	3	Appt.	TBA	
Electives						
ENGR 1090†	19469	Engr. Cooperative Program	1	<i>please see co-op office for permission #</i>		

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Engineering Science Nanotechnology (Chemistry/Bioengineering)

Undergraduate Course Schedule

Summer Term (2187)

Required Courses						
Subj./Catlg#	Class #	Course	Units	Days	Time	Room
ENGR0020	11817	Probability & Statistics	4	MW	2:30-4:25p	1044 Benedum
	11818	<i>recitation</i>	0	F	8:30-10:25a	1044 Benedum
	11816	<i>recitation</i>	0	F	11:00-12:55p	1044 Benedum
ECE 0257	15894	Analysis & Design of Electronic Circuits	3	TuTh	12:30-2:15p	157 Benedum
MEMS0051	13887	Introduction to Thermodynamics	3	M	4:00-6:30p	309 Benedum
ENGSCI 1801	17046	Engineering Design 1	3	Appt.	TBA	
ENGSCI 1802	17045	Engineering Design 2	3	Appt.	TBA	
Electives						
CHEM 1,2,3 Options						
CHEM 0250	10577	Intro to Analytical Chemistry (6 wk 2)	3	MTuThF	10:30-12:15p	132 Chevron
	10578	<i>recitation</i>		W	10:30-11:20a	132 Chevron
CHEM 0310	10153	Organic Chemistry 1 (4 wk 1)	3	MTuWThF	9:00-10:45a	150 Chevron
	10401	<i>recitation</i>		W	11:00-11:50a	150 Chevron
	16533	Organic Chemistry 1 (6 wk 2)	3	MTuThF	1:00-2:45pm	152 Chevron
	16534	<i>recitation</i>		W	1:00-1:50p	152 Chevron
CHEM 0320	10154	Organic Chemistry 2 (6 wk 1)	3	MTuThF	1:00-2:45p	152 Chevron
	10400	<i>recitation</i>		W	1:00-1:50p	152 Chevron
	10244	Organic Chemistry 2 (6 wk 2)	3	MTuThF	9:00-10:45a	150 Chevron
BIOSC 1000	10384	Biochemistry (6 wk 2)	3	MTuWTh	9:00-10:45a	A221 Langley
	15962	<i>recitation</i>		TuTh	11:00-11:50a	A221 Langley
	20355	<i>recitation</i>		TuTh	12:00-12:50p	A221 Langley
	17228	Biochemistry (6 wk 1)	3	MTuWTh	9:00-10:45a	L9 Clapp
	17229	<i>recitation</i>		TuTh	11:00-11:50a	L9 Clapp
	19001	<i>recitation</i>		TuTh	12:00-12:50p	L9 Clapp
Lifesci/BioEng 1,2 Options						
BIOSC 0150	10144	Foundations of Biology 1 (6 wk 1)	3	MWF	8:30-10:45a	A221 Langley
	10433	<i>recitation</i>	3	MW	11:00-11:50a	A221 Langley
BIOSC 0160	10145	Foundations of Biology 2 (6 wk 2)	3	MWF	8:30-10:45a	169 Crawford
	10619	<i>recitation</i>		MW	11:00-11:50a	169 Crawford
	15227	Foundations of Biology 2 (6 wk 1)	3	MWF	8:30-10:45a	A224 Langley
	15228	<i>recitation</i>		MW	11:00-11:50a	A224 Langley
BIOSC 1250	19430	Human Physiology (6 wk 2)	3	MTuWTh	10:00-11:45a	A214 Langley
NROSCI 1000	17867	Intro to Neuroscience (6 wk 1)	3	TuTh	9:00-12:15p	A202 Langley
ENGR0135	11863	Statics & Mechanics of Materials 1	3	Th	4:00-6:30p	227 Benedum
Other						
ENGR 1090†	19469	Engr. Cooperative Program	1		<i>please see co-op office for permission #</i>	

Engineering Science Nuclear Energy Concentration

Undergraduate Course Schedule

Summer Term (2187)

Required Courses						
Subj./Catlg#	Class #	Course	Units	Days	Time	Room
ENGR 0135	11863	Statics & Mechanics of Materials 1	3	Th	4:00-6:30p	227 Benedum
ENGR 0145	11864	Statics & Mechanics of Materials 2	3	Th	4:00-6:30p	318 Benedum
MEMS 0031	13888	Electrical Circuits	3	Tu	4:00-6:30pm	320 Benedum
MEMS 0051	13887	Introduction to Thermodynamics	3	M	4:00-6:30p	309 Benedum
MEMS 1015	15002	Rigid-Body Dynamics	3	W	4:00-6:30p	318 Benedum
MEMS 1042	15424	Mechanical Measurements 2	3	M	9:00-10:50a	318 Benedum
	15425	<i>lab</i>	0	W	10:00-11:50a	SB27 Benedum
	15426	<i>lab</i>	0	W	12:00-1:50p	SB27 Benedum
MEMS 1043	15427	Senior Design Project	3	Th	6:30-9:00p	318 Benedum
MEMS 1052	15003	Heat and Mass Transfer	3	Tu	6:30-9:00p	320 Benedum
MEMS 1071	17663	Applied Fluid Mechanics	3	Tu	4:00-6:30p	318 Benedum
ENGSCI 1801	17046	Engineering Design 1	3	Appt.	TBA	TBA
ENGSCI 1802	17045	Engineering Design 2	3	Appt.	TBA	TBA
Electives						
ENGR 1090†	19469	Engr. Cooperative Program	1	<i>please see co-op office for permission #</i>		

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To earn a BS in Engineering Science with a concentration in Nuclear Energy the student takes an additional 15 credits of Program Electives in addition to the required courses. The 15 credits must include an area of emphasis consisting of at least 9 credits of interrelated courses demonstrating depth of knowledge. Note that at least 6 of the 15 program elective credits must be in Engineering, Science or Math. Potential 3-course areas of emphasis are listed below but sequences in foreign languages and culture, economics, business, and other areas can be approved by the ECSI program director.

Potential 3-course areas of emphasis:

- Nuclear Engineering - graduate nuclear engineering courses
- Civil & Environmental Engineering - Structural, Water Resources, Construction Management & Sustainability, Environmental Engineering
- Bioengineering - Biosignals and Imaging
- Electrical Engineering - Power
- Industrial Engineering - Engineering Management
- Mechanical Engineering - Dynamic Systems, Solid Mechanics
- Materials Science & Engineering
- Physics
- Mathematics - Numerical methods and Analysis

Alternatively the student may fulfill the elective requirement by earning a certificate (besides the Nuclear Engineering Certificate) offered by the SSOE:

- Energy Resource Utilization
- Fessenden Honors Engineering
- International Engineering Studies
- Product Realization
- Sustainable Engineering