



## BSHFE Notes

- (a) Mathematics or Natural Science Elective  
Courses selected may not be used to fulfill any other course requirement. The following courses are recommended: MATH 42, MATH 61, MATH 70.  
Select From:  
Any course having attribute SOE-Mathematics  
Any course having attribute SOE-Natural Sciences
- (b) Probability & Statistics  
Courses selected may not be used to fulfill any other course requirement.  
Select From: ES 56, MATH 165, MATH 166, CEE 156, ME 102.  
Specific pre-requisites (e.g. MATH 42) may be required.
- (c) Psychology Elective  
Courses selected may not be used to fulfill any other course requirement.  
Select From:  
Any PSY course
- (d) Any course having the attribute SOE-HASS-Humanities. This humanities elective may not be satisfied with pre-matriculation credits, ENG 1, or ENG 3.
- (e) Humanities, Arts or Social Sciences Electives  
Select From:  
Any course having attribute SOE-HASS  
Any course having attribute SOE-HASS-Humanities  
Any course having attribute SOE-HASS-Arts  
Any course having attribute SOE-HASS-Social Sciences
- (f) Senior Capstone  
Courses selected may not be used to fulfill any other course or elective requirement except as noted below for COMP 98.  
Select from:  
ENP 120, ME 74, COMP 97 & 98 (note: if you choose COMP 97 & 98, COMP 98 can be used to fulfill a domain or COMP elective)
- (g) HFE Core Elective  
Courses selected may not be used to fulfill any other course requirement.  
Select From:  
ENP 109, ENP 110, ENP 112, ENP 114, ENP 162, ENP 163
- (h) COMP or HFE Core Elective  
Courses selected may not be used to fulfill any other course requirement.  
Select From:  
Any COMP course having attribute SOE-Computing  
Any COMP course having attribute SOE-Engineering  
Any COMP course having attribute SOE-Mathematics  
Additionally approved courses: ENP 109, ENP 110, ENP 112, ENP 114, ENP 162, ENP 163
- (i) HFE Open Elective  
Courses selected may not be used to fulfill any other course requirement.  
Select From:  
Any ENP course
- (j) Domain Electives  
In keeping with the interdisciplinary and multidisciplinary nature of the field, students are encouraged to choose electives from among a wide array of fields. Your domain focus electives should be chosen to compliment your career objectives and prepare you to do human factors engineering within a specific domain. For example, if you are interested in doing HFE work in biomedical devices, then these electives might be in Biomedical Engineering, or in biology, medicine, and related areas.  
Courses may only be taken from the academic units listed below.  
All courses must be at least 3 SHUs each.  
At least 2 courses must be from the same academic unit.  
At least 2 courses outside of Engineering Psychology & Human Factors Engineering

Art History (FAH/FAHS)  
Anthropology (ANTH)  
Biology (BIO)  
Biomedical Engineering (BME)  
Chemical & Biological Engineering (CHBE)  
Child Study & Human Development (CSDH)  
Civic Studies (CVS)  
Civil & Environmental Engineering (CEE)  
Community Health (CH)  
Computer Science/Data Science (COMP)  
Economics (EC)  
Education (ED)  
Electrical & Computer Engineering (EE)  
Engineering Management (EM)  
Engineering Science (ES)  
Engineering Psychology/Human Factors Engineering (ENP)  
Entrepreneurship (ENT)

Film & Media Studies (FMS)  
Linguistics (LING)  
Mathematics (MATH)  
Mechanical Engineering (ME)  
Music (MUS)  
Occupational Therapy (OTS)  
Peace & Justice Studies (PJS)  
Political Science (PS)  
Psychology (PSY)  
Sociology (SOC)  
Science, Technology, and Society (STS)  
Studio Art (CER, DIG, DRW, DRWC, DRWM, FLM, FLMC, FNDC,  
GRA, GRAC, GRAM, MTL, PAI, PAIC, PAIM, PER, PHT,  
PHTMPRT, PRTC, PRTM, SCP, SND, VID, VIDC)  
Urban & Environmental Planning (UEP)

## BSHFE Course Selection Guidance

### Fall Semester, First Year

Course	SHU	SOE Attribute
EN 1 Introduction to Engineering	3	Engineering
MATH 32 Calculus I	3	Mathematics
PHY 11 General Physics I with laboratory	5	Natural Sciences
ENG 1 Expository Writing	3	HASS
<b>Semester Total SHU</b>	<b>14</b>	

### Spring Semester, First Year

Course	SHU	SOE Attribute
ES 2 Introduction to Computing in Engineering or or COMP 11 Introduction to Computer Science	4	Computing
PSY 1 Introduction to Psychology	3	HASS
MATH 34 Calculus II	3	Mathematics
Math or Natural Sciences Elective	3-5	varies with selection
<b>Semester Total SHU</b>	<b>13-15</b>	

### Fall Semester, Second Year

Course	SHU	SOE Attribute
ENP 53 Engineering Psychology	3	HASS
Humanities Elective	3-5	HASS
Math or Natural Sciences Elective	3-5	varies with selection
ME 10 Mat. & Manufact.	4	Engineering
ME 20 Mechanics I or ES 5 Statics & Dynamics	3	Engineering
<b>Semester Total SHU</b>	<b>16-20</b>	

### Spring Semester, Second Year

Course	SHU	SOE Attribute
ENP 64 Methods for Human Factors Engineering	3	Engineering
ENP 130 Advanced Engineering Psychology	3	HASS
ME 40 Engineering Design I	4	Engineering
Probability & Statistics	3-4	Mathematics
Psychology Elective	3-5	HASS
<b>Semester Total SHU</b>	<b>16-20</b>	

### Fall Semester, Third Year

Course	SHU	SOE Attribute
EM 52 Technical & Managerial Communication	3	HASS
Domain Elective	3-5	varies with selection
ME 30 Robotics I or ES 3 Intro. to Elect. Systems w/Lab	4-5	Engineering
Psychology Elective	3-5	HASS
Unrestricted Elective	1-3	varies with selection
<b>Semester Total SHU</b>	<b>14-21</b>	

### Spring Semester, Third Year

Course	SHU	SOE Attribute
ENP 161 Human Factors Product Design	3	Engineering
ENP 166 Computer Interface Design or COMP 171 Human Computer Interaction	3	varies with selection
Math or Natural Sciences Elective	3-5	varies with selection
Domain Electives	6-10	varies with selection
<b>Semester Total SHU</b>	<b>13-20</b>	

### Fall Semester, Fourth Year

Course	SHU	SOE Attribute
Senior Capstone or Domain Elective	3-5	Engineering
COMP or HFE Core Elective	3-5	varies with selection
ENP Core Elective	3	varies with selection
Unrestricted Elective	3-5	varies with selection
<b>Semester Total SHU</b>	<b>12-18</b>	

### Spring Semester, Fourth Year

Course	SHU	SOE Attribute
Senior Capstone or Domain Elective	3-5	varies with selection
ENP 164 Applied Behavioral Statistics	3	Mathematics
HFE Open Elective	3	varies with selection
Unrestricted Elective	3-5	varies with selection
<b>Semester Total SHU</b>	<b>12-16</b>	