

**Tufts University – School of Engineering**  
**Class of 2025** (requirements as established in the 2021-2022 Bulletin)  
**Bachelor of Science in Engineering – Program in Architectural Studies (BSE-Arch)**  
**Major Requirement**

\* Courses that require a letter grade (i.e., no pass/fail)

The BSE-Arch comprises credit requirements and course requirements as established by the School of Engineering and Department of Civil & Environmental Engineering, in collaboration with the Department of History of Art & Architecture. Students must satisfy the SOE requirements listed in the Credit Requirements box, as well as fulfill all course requirements. The School of Engineering requirements are shown in italics and fall outside second major double counting rules. SHU values listed for each course requirement reflect those associated with the corresponding Tufts course. Unless otherwise noted, course requirements may be satisfied with transfer courses having SHU values that are different than those shown here. In all cases, students should enter the SHUs received or earned in the correct SOE-Attribute column for a given course requirement to ensure they meet the credit requirements. For planning purposes, students completing the BSE-Arch requirements with Tufts courses will earn at least 123 SHU.

Mathematics & Natural Sciences*	SHU	SOE Attribute						Term
		C	E	M	NS	HASS	None	
MATH 32 Calculus I	4							
MATH 34 Calculus II	4							
MATH 42 Calculus III	4							
MATH 51 Differential Equations	4							
ES 56 Probability & Statistics	4							
PHY 11 Gen. Physics I w/ lab	5							
<i>≥30 SHU of SOE-Mathematics + SOE-Natural Sciences are required for the degree. List additional courses below (see note a).</i>								
<b>subtotal</b>	<b>≥30</b>	-	-			-	-	

Civil Engineering*	SHU	SOE Attribute						Term
		C	E	M	NS	HASS	None	
<i>EN 1 Applications in Eng.</i>	3							
<i>ES 2 Intro. Comp. in Eng. or CS 11 Intro. Comp. Sci.</i>	4							
ES 5 Statics & Dynamics	3							
ES 9 Strength of Materials	4							
CEE 22 Structural Analysis	4							
CEE 42 Intro. Geotech. Eng.	4							
CEE Design Elective (f)	3							
CEE Design Elective (f)	3							
CEE 81 Capstone	4							
<b>subtotal</b>	<b>32</b>			-	-	-	-	

Communication*	SHU	SOE Attribute						Term
		C	E	M	NS	HASS	None	
<i>ENG 1* Expos. Writing or ENG 3</i>	3							
Visual Thinking Elective (b)	2-4							
ES 18 CAD	4							
CEE 187 GIS or CEE 188 BIM	3							
<b>subtotal</b>	<b>12-14</b>	-	-	-	-	-	-	

Art & Architecture*	SHU	SOE Attribute						Term
		C	E	M	NS	HASS	None	
FAH 8 Intro. to Architecture	3							
FAH 96 Design: Arch.	5							
FAH 97 Design: Adv. Arch	5							
FAH 98 Integ. Proj. Sem.	3							
<i>List ≥15 SHU Art &amp; Architecture electives are required for the degree. List courses below (see note g).</i>								
<b>subtotal</b>	<b>≥31</b>	-	-	-	-			

Program Electives	SHU	SOE Attribute						Term
		C	E	M	NS	HASS	None	
<i>Humanities Elective (c)</i>	≥3							
<i>Social Science Elective (d)</i>	≥3							
<i>List ≥12 SHU Program Electives below (e)</i>								
<b>subtotal</b>	<b>≥18</b>	-	-	-	-	-	-	

Credit Requirements	SOE Attribute						Total
	E	C	M	NS	HASS	None	
<i>SOE Requirements</i>	≥30		≥30	≥24	-		≥120
<b>Student Totals</b>							

**Abbreviations:**

- SHU = Semester Hour Unit
- SOE = School of Engineering
- C = Courses having attribute SOE-Computing
- E = Courses having attribute SOE-Engineering
- M = Courses having attribute SOE-Mathematics
- NS = Courses having attribute SOE-Natural Sciences
- HASS = Course having attribute SOE-HASS (Humanities, Arts, and Social Sciences)
- None = Course without SOE attribute

**Student and Advisor Notes:**

## BSE-Arch Notes

(a) Mathematics or Natural Sciences Electives

Select from:

- Any course having attribute SOE-Mathematics
- Any course having attribute SOE-Natural Sciences

(b) Visual Thinking Elective

Select From:

DRWM 26, DRWM 63, GRAM 20, GRAM 21, GRAM 39, TPS 63

(c) Humanities Elective

At least 3 SHU of Humanities are required. Requirement may not be satisfied with pre-matriculation credits, ENG 1, ENG 3, or a course satisfying the Social Sciences Elective (d).

Select From:

Any course having attribute SOE-HASS-Humanities

(d) Social Sciences Elective

At least 3 SHU of Social Sciences are required. Requirement may not be satisfied with pre-matriculation credits or a course satisfying the Humanities elective (c).

Select From:

Any course having attribute SOE-HASS-Social Sciences

(e) Program Electives

Courses selected may not be used to fulfill any other course requirement, Mathematics & Natural Sciences Electives, Art & Architecture Electives, or Design Electives.

Select from:

- Any course having attribute SOE-Mathematics
- Any course having attribute SOE-Natural Sciences
- Any of the following additionally approved courses:
  - Art History: FAH 19, FAH 21/121, FAH 28/128, FAH 34/134, FAH 127
  - Architecture: FAH 15/115, FAH 25/125, FAH 92/192, FAH 95/195, FAH 97, FAH 120, FAH 123, FAH 193, FAH 196, FAH 198
  - Anthropology: ANTH 20, ANTH 186
  - Civil & Environmental Engineering: CEE 12, CEE 24, CEE 25, CEE 32, CEE 80, CEE 106, CEE 111, CEE 127, CEE 146, CEE 149
  - Economics: EC5, EC 8, EC 30, EC 127
  - Engineering Management: EM 51, EM 52, EM 54, EM 153
  - Engineering Psychology: ENP 61
  - Engineering Science: ES 7, ES 8, ES 55
  - Political Science: PS 15, PS 195
  - Sociology: SOC 113, SOC 180
  - Studio Art: DRWM 26, DRWM 63, GRAM 20, GRAM 21, GRAM 39, SCPM 77, TPS 63, TPS 70, TPS 72, TPS 162
  - Urban & Environmental Planning: UEP 11, UEP 101, UEP 105, UEP 113, UEP 130, UEP 178, UEP 236, UEP 237, UEP 238

(f) CEE Design Electives

selected from:

CEE 24, CEE 25, CEE 32, CEE 146

(g) Art & Architecture Elective:

At least 15 SHU of coursework comprising at least one course in each of the three areas – Art History, Architecture, and Studio Art

Select From:

- Art History: FAH 19, FAH 21/121, FAH 28/128, FAH 34/134, FAH 127
- Architecture: FAH 15/115, FAH 25/125, FAH 92/192, FAH 95/195, FAH 120, FAH 123, FAH 193, FAH 196
- Studio Art: DRWM 26, DRWM 63, GRAM 20, GRAM 21, GRAM 39, SCPM 77, DR 20, DR 125

## BSE-Arch Course Selection Guidance

### Fall Semester, First Year

Course	SHU	SOE Attribute
<i>EN 1 Introduction to Engineering</i>	3	Engineering
MATH 32 Calculus I	4	Mathematics
PHY 11 General Physics I with laboratory	5	Natural Sciences
<i>ENG 1 Expository Writing</i>	3	HASS
<b>Semester Total SHU</b>	<b>15</b>	

### Spring Semester, First Year

Course	SHU	SOE Attribute
FAH 8 Intro. Architecture	3	HASS
<i>ES 2 Intro. Comp. in Eng. or CS 11 Introduction to Computer Science</i>	4	Engineering or Computing
MATH 34 Calculus II	4	Mathematics
CHEM 1 Chemical Fundamentals with laboratory	5	Natural Sciences
<b>Semester Total SHU</b>	<b>16</b>	

### Fall Semester, Second Year

Course	SHU	SOE Attribute
ES 5 Statics & Dynamics	3	Engineering
ES 18 CAD	4	Engineering
Architecture course with number <100 (g)	3	HASS
MATH 42 Calculus III	3	Mathematics
Mathematics or Natural Sciences Elective	3-5	varies with selection
<b>Semester Total SHU</b>	<b>16-18</b>	

### Spring Semester, Second Year

Course	SHU	SOE Attribute
ES 9 Strength of Materials	4	Engineering
Visual Thinking Elective	2-4	HASS
MATH 51 Differential Equations	3	Mathematics
Mathematics or Natural Sciences Elective	3-5	varies with selection
<i>HASS or Technical Elective</i>	3-5	varies with selection
<b>Semester Total SHU</b>	<b>15-21</b>	

### Fall Semester, Third Year

Course	SHU	SOE Attribute
CEE 22 Structural Analysis	4	Engineering
FAH 96 Design: Architecture	5	HASS
Art & Architecture Elective	3-5	HASS
CEE 187 GIS or CEE 188 BIM	3	Engineering
<i>HASS or Technical Elective</i>	3-5	varies with selections
<b>Semester Total SHU</b>	<b>17-21</b>	

### Spring Semester, Third Year

Course	SHU	SOE Attribute
CEE 42 Introduction to Geotechnical Engineering	4	Engineering
Art & Architecture Elective	3-5	HASS
Design Elective	3-5	varies with selection
<i>HASS or Technical Electives</i>	6-10	varies with selection
<b>Semester Total SHU</b>	<b>16-21</b>	

### Fall Semester, Fourth Year

Course	SHU	SOE Attribute
Design Elective	3-5	varies with selection
<i>HASS or Technical Electives</i>	9-15	varies with selections
<b>Semester Total SHU</b>	<b>12-20</b>	

### Spring Semester, Fourth Year

Course	SHU	SOE Attribute
CEE 81 Capstone	4	Engineering
FAH 98 Integrative Project Seminar	3	HASS
<i>HASS or Technical Electives</i>	6-10	varies with selections
<b>Semester Total SHU</b>	<b>13-17</b>	