

# SURVEYING ENGINEERING, B.S.

**Begin Campus:** Wilkes-Barre

**End Campus:** Wilkes-Barre

## Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2023-24 academic year. To access previous years' suggested academic plans, please visit the archive (<https://bulletins.psu.edu/undergraduate/archive/>) to view the appropriate Undergraduate Bulletin edition (*Note: the archive only contains suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin*).

### Surveying Engineering, B.S. at Wilkes-Barre Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

**If you are starting at a campus other than the one this plan is ending at, please refer here:**

<http://advising.engr.psu.edu/degree-requirements/academic-plans-by-major.aspx>

#### First Year

Fall	Credits Spring	Credits
ENGL 15	3 ECON 102 or 104 <sup>†</sup>	3
EDSGN 100	3 MATH 141 <sup>**†</sup>	4
General Education Course	3 MATH 220	2
PSU 8	1 PHYS 211 <sup>*†</sup>	4
MATH 140 <sup>**†</sup>	4 SUR 162 <sup>*</sup>	3
SUR 111 <sup>*</sup>	4	
	<b>18</b>	<b>16</b>

#### Second Year

Fall	Credits Spring	Credits
MATH 230	4 CMPSC 201 or 200	3
PHYS 212	4 MATH 251	4
SUR 212	4 PHYS 214	2
SUR 241 <sup>*</sup>	3 SUR 222	3
STAT 200	4 SUR 262	2
	<b>19</b>	<b>14</b>

#### Third Year

Fall	Credits Spring	Credits
CAS 100A <sup>††</sup>	3 ENGL 202C <sup>‡</sup>	3
General Education Course	3 General Education Course	3
General Education Course (GHW)	1.5 SUR 362	3
SUR 272 <sup>*</sup>	3 SUR 372W <sup>*</sup>	3
SUR 341	3 SUR 381	4

SUR 351	3	
	<b>16.5</b>	<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>	<b>Credits Spring</b>	<b>Credits</b>
General Education Course	3 General Education Course (GHW)	1.5
General Education Course	3 SUR 313	3
SUR 462	3 SUR 441	3
SUR 471	3 SUR 422	3
SUR 490	1 SUR 455	3
	SUR 482	3
	<b>13</b>	<b>16.5</b>

#### Total Credits 129

- \* Course requires a grade of C or better for the major
- ‡ Course requires a grade of C or better for General Education
- # Course is an Entrance to Major requirement
- † Course satisfies General Education and degree requirement

#### University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

## Concurrent B.S. in Surveying Engineering and Civil Engineering at Wilkes Barre Campus and University Park Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

### First Year

Fall	Credits Spring	Credits
CHEM 110 <sup>*1</sup>	3 CMPSC 201 or 200	3
CHEM 111	1 MATH 141 <sup>**1,2</sup>	4
EDSGN 100	3 MATH 220	2
ENGL 15 <sup>‡</sup>	3 PHYS 211 <sup>**1,2</sup>	4
MATH 140 <sup>**†1</sup>	4 SUR 162 <sup>*</sup>	3
PSU 8	1 SUR 262	2
SUR 111 <sup>*2,3</sup>	4	
	<b>19</b>	<b>18</b>

### Second Year

Fall	Credits Spring	Credits
MATH 230	4 MATH 251 <sup>*1</sup>	4
PHYS 212 <sup>**1</sup>	4 PHYS 213 <sup>†</sup>	2
SUR 212	4 PHYS 214 <sup>†</sup>	2
SUR 241 <sup>*2</sup>	3 SUR 222	3
SUR 272 <sup>*2</sup>	3 SUR 362 <sup>2</sup>	3
	SUR 372W <sup>*2</sup>	3
	<b>18</b>	<b>17</b>

### Third Year

Fall	Credits Spring	Credits
EMCH 211 <sup>*3</sup>	3 ENGL 202C <sup>‡</sup>	3
General Education Course(GHW) <sup>6</sup>	1.5 EMCH 212 <sup>*3</sup>	3
SUR 341	3 EMCH 213 <sup>*3</sup>	3
SUR 351	3 SUR 381	4
SUR 462 (C E technical elective) <sup>5</sup>	3 SUR 441 <sup>5</sup>	3
SUR 471	3 SUR 455 (C E technical elective) <sup>5</sup>	3
SUR 490	1	
	<b>17.5</b>	<b>19</b>

### Fourth Year

Fall	Credits Spring	Credits
CAS 100A <sup>‡</sup>	3 CE 335 <sup>*3</sup>	3
CE 332 <sup>*3</sup>	3 CE 336 <sup>*3</sup>	3
CE 340 <sup>*3</sup>	3 CE 337 <sup>*3</sup>	1
CE 360 <sup>*3</sup>	3 CE 370 <sup>*3</sup>	3
General Education Course	3 ECON 102 or 104 <sup>†</sup>	3
GEOSC 1	3 General Education Course	3
	General Education Course(GHW) <sup>6</sup>	1.5
	<b>18</b>	<b>17.5</b>

### Fifth Year

Fall	Credits Spring	Credits
CE 321 <sup>*3</sup>	3 C E 3xx/4xx-SUR E technical elective <sup>4</sup>	3
C E 3xx/4xx-SUR E technical elective <sup>4</sup>	3 General Education Course	3
C E 3xx/4xx-SUR E technical elective <sup>4</sup>	3 General Education Course	3
EE 211 or 212 <sup>6</sup>	3 General Education Course	3
CE 410	3 IE 302	3
STAT 401	3 ME 201 <sup>6</sup>	3
	<b>18</b>	<b>18</b>

### Total Credits 180

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

### University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

<sup>1</sup> Courses CHEM 110, MATH 140, MATH 141, MATH 251, PHYS 211 and PHYS 212 require a grade of C or better for entrance into the C E major.

<sup>2</sup> Courses MATH 140, MATH 141, PHYS 211, SUR 111, SUR 241, SUR 272, SUR 362, and SUR 372W require a C or better for graduation in the SUR E major

<sup>3</sup> Courses CE 321, CE 332, CE 335, CE 336, CE 337, CE 340, CE 360, CE 370, E MCH 211, EMCH 212, EMCH 213 and SUR 111 require a C or better for graduation in the CE major.

<sup>4</sup> C E 3xx/4xx electives must be selected from two of three technical areas in the Civil Engineering program – Structures (C E x4x), Hydrosystems (C E x6x), and Environmental (C E x7x).

<sup>5</sup> SUR 462, SUR 441, and SUR 455 may be substituted for a C E related areas technical elective if taken at the Wilkes-Barre campus prior to changing assignment to the University Park campus

<sup>6</sup> For those students who complete the ROTC program, three ROTC credits may be used to substitute for E E 211/212 or M E 201 and three ROTC credits may be used to substitute for the GHW requirements.

### Concurrent Degree Request and Acceptance Notes:

- To be eligible for this program, a student must initially enroll in the SURE program at the Wilkes-Barre campus. All SURE majors are assigned an "entrance-to-major" (ETM) pool semester, even though they are already enrolled in a major.

- Students in the SURE major must make their request for concurrent degree status during their ETM pool semester, which is typically the spring semester of their second year.
- ETM courses of CHEM 110, MATH 140, MATH 141, and PHYS 211 must be completed with a C or better before the request for concurrent degree status will be acted upon.
- To be considered for the concurrent degree option, the applicant must have a cumulative grade-point average of 2.70 or higher at the time of the ETM pool year. However, if the ETM GPA requirement is higher due to enrollment controls in the CE department, the higher GPA will be used for admission to the major.
- Upon acceptance in to the CE major, students will remain at the Wilkes-Barre campus to complete their third year of study. During the spring semester of the third year, students will request a change of campus from WB to UP for the fall semester of the fourth year (7th semester).
- Students who wish to change their major to SURE during their first year of study, and who are also in pursuit of the concurrent degree option, should contact the Surveying Engineering program chair to discuss feasibility of completing the option.