# ARCHITECTURAL <br> ENGINEERING, B.A.E. 

Begin Campus: Any Penn State Campus
End Campus: University Park

## 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).
Construction Option (2nd Year ETM): Architectural Engineering, B.A.E. at University Park Campus

## Standard Path: Direct Entry from ENGAE to AE

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.

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## First Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| AE 124 (or First Year Seminar) ${ }^{\dagger}$ | 1 ARTH 202N (GA) (US/IL) ${ }^{\dagger}$ | 3 |
| ECON 102 or 104 (GS) ${ }^{\dagger}$ | 3 EDSGN 100\# | 3 |
| CHEM 110 (GN) ${ }^{\text {*\# } \dagger}$ | 3 MATH 141 or 141E (GQ) ${ }^{\star \ddagger \# \dagger}$ | 4 |
| CHEM 111 | 1 PHYS 211 (PHYS 211L and 211R) (GN) ${ }^{* \#+}$ | 4 |
| ENGL 15, 30H, or ESL 15 (GWS) ${ }^{\ddagger}$ | 3 CAS 100A or 100B (GWS) ${ }^{\ddagger \dagger}$ | 3 |
| MATH 140 or 140E (GQ) ${ }^{\text {* } \ddagger+\dagger}$ | 4 |  |
|  | 15 | 17 |
| Second Year |  |  |
| Fall | Credits Spring | Credits |
| AE 202 | 3 AE 222 | 3 |
| AE 221 | 3 AE 240 | 3 |
| ARCH 130A | 3 ARCH 130B | 3 |
| EMCH 211 | 3 EMCH 213 | 3 |
| MATH 250 | 3 PHYS 212 (PHYS 212L and 212R) (GN) | 4 |
| PHYS 213 | 2 |  |
|  | 17 | 16 |

Third Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| AE 308* | 4 AE 311* | 3 |
| AE 309 | 3 AE 372* | 3 |
| AE 310* | $\begin{aligned} & 3 \text { ARCH } 100 \text { or LARCH } 60 \\ & (\mathrm{GA})^{\dagger} \end{aligned}$ | 3 |
| MATH 220 | 2 EMCH 212 | 3 |
| MATH 231 | 2 General Education Course (GHW) | 3 |
| ME 201 | 3 |  |
|  | 17 | 15 |
| Fourth Year |  |  |
| Fall | Credits Spring | Credits |
| AE 404 | 3 AE 405 | 4 |
| AE 441 | 1 AE 472 | 3 |
| AE 475 | 3 AE 476 | 3 |
| ARCH 441 | 3 CE 336 | 3 |
| MGMT 326 | 3 CE 337 | 1 |
| General Education Course | 3 STAT 401 or IE 424 | 3 |
|  | 16 | 17 |

## Fifth Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| AE 473 | 3 AE 482 | 4 |
| AE 481W | 4 General Education Course | 3 |
| CE 209 | 2 General Education Course | 3 |
| ENGL 202C (GWS) ${ }^{\ddagger \dagger}$ | 3 Department Elective | 3 |
| Department Elective | 3 Department Elective | 2 |
|  | $\mathbf{1 5}$ | $\mathbf{1 5}$ |

Total Credits 160

* Course requires a grade of $C$ or better for the major
$\ddagger$ 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).
$\mathrm{W}, \mathrm{M}, \mathrm{X}$, 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.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and satisfy a portion of that General Education requirement. If the student's program prescribes GWS these courses will
replace both ENGL 15/ENGL 30H and CAS 100A/CAS 100B/CAS 100C.
Each course is 3 credits.

## College Notes:

- Some AE courses are offered every semester. To accommodate class size limitations, specific courses have been paired to permit students to interchange the semesters in which they enroll in these courses. These pairings are as follows: AE 240 and ME 201; AE 308 and AE 372; AE 310 and AE 311; ARCH 441 and (STAT 401 or IE 424).
- Fourth and Fifth-year AE courses are once a year in the semester shown in the above academic plan.
- Department Electives: Any 400 -level or 500 -level A E course is acceptable, except AE 401, AE 402, AE 404, AE 421, AE 422, and AE 424. For recommended $A E$ and other approved courses for each option, go to www.ae.psu.edu/academics/undergraduate/ electives.aspx (https://www.ae.psu.edu/academics/undergraduate/ electives.aspx) and click on "Department Elective Worksheet."
- Students who complete the ROTC Program may substitute 3 ROTC credits for the GHW requirement and 3 ROTC credits for a Department Elective.
- (ARCH 100 or LARCH 60) and ARTH 202N are required GA courses. Substitution by an advanced course is possible. See an adviser.
- ME 300 may be substituted for ME 201.


## Construction Option (3rd Year ETM): Architectural Engineering, B.A.E. at University Park Campus

Alternative Path: Direct Entry from ENGR to AE

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.

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## First Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| CHEM 110 (GN) ${ }^{\text {*\# } \dagger}$ | 3 ARTH 202N (GA) (US/IL) ${ }^{\dagger}$ | 3 |
| AE 124 (or other First Year Seminar) ${ }^{\dagger}$ | 1 EDSGN 100\# | 3 |
| MATH 140 or 140E (GQ) ${ }^{\text {* }}$ \# $\dagger$ | 4 MATH 141 or 141 E (GQ) ${ }^{\text {* } \ddagger \dagger}$ | 4 |
| CHEM 111 | 1 PHYS 211 (PHYS 211L and 211R) (GN) ${ }^{\star \# \dagger}$ | 4 |
| ECON 102 or 104 (GS) ${ }^{\dagger}$ | 3 CAS 100 A or $100 \mathrm{~B}^{\ddagger+}$ | 3 |
| ENGL 15, 30H, or ESL 15 (GWS) ${ }^{\ddagger \dagger}$ | 3 |  |
|  | 15 | 17 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| ARCH 100 or LARCH 60 $(\mathrm{GA})^{\dagger}$ | 3 EMCH 212 | 3 |
| EMCH 211 | 3 EMCH 213 | 3 |
| ME 201 | 3 MATH 220 | 2 |
| MATH 250 (GQ) | 3 MATH 231 | 2 |
| PHYS 212 (PHYS 212L and 212R) $(G N)^{\dagger}$ | 4 PHYS 213 | 2 |
|  | General Education Course (GHW) | 1.5 |
|  | General Education Course (GHW) | 1.5 |


|  | 16 | $\mathbf{1 5}$ |
| :--- | :---: | ---: |
| Third Year | Credits Spring | Credits |
| Fall | 3 AE 222 | 3 |
| AE 202 | 3 AE 240 | 3 |
| AE 221 | 4 AE 310* | 3 |
| AE 308* | 3 AE 311* | 3 |
| AE 309 | 3 AE 372* | 3 |
| ARCH 130A | ARCH 130B | 3 |
|  | $\mathbf{1 6}$ | 3 |
|  |  | $\mathbf{1 8}$ |

## Fourth Year

| Fall | Credits Spring | Credits |
| :--- | ---: | ---: |
| AE 404 | 3 AE 405 | 4 |
| AE 441 | 1 AE 472 | 3 |
| AE 475 | 3 AE 476 | 3 |


| ARCH 441 | 3 CE 336 | 3 |
| :--- | :--- | ---: |
| MGMT 326 | 3 CE 337 | 1 |
| General Education Course | 3 STAT 401 or IE 424 | 3 |
|  | $\mathbf{1 6}$ | $\mathbf{1 7}$ |


| Fifth Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| AE 473 | 3 AE 482 | 4 |
| AE 481W | 4 Department Elective | 3 |
| CE 209 | 2 Department Elective | 2 |
| Department Elective | 3 General Education Course | 3 |
| ENGL 202C $(G W S)^{\ddagger \dagger}$ | 3 General Education Course | 3 |
|  | $\mathbf{1 5}$ | $\mathbf{1 5}$ |

## Total Credits 160

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## College Notes:

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- ME 300 may be substituted for ME 201.


## Lighting/Electrical Option (2nd Year ETM): Architectural Engineering, B.A.E. at University Park Campus

Standard Path: Direct Entry from ENGAE to AE

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| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| AE 124 (or other First Year Seminar course) ${ }^{\dagger}$ | 1 ARTH 202N (GA) (US/IL) ${ }^{\dagger}$ | 3 |
| ECON 102 or 104 (GS) ${ }^{\dagger}$ | 3 EDSGN 100\# | 3 |
| CHEM 110 (GN) ${ }^{\text {*\# }}$ | 3 MATH 141 or 141E (GQ) ${ }^{\text {²\#\# }}$ | 4 |
| CHEM 111 | 1 PHYS 211 (PHYS 211L and 211R) (GN) ${ }^{\star \# t}$ | 4 |
| ENGL 15,30H, or ESL 15 (GWS) ${ }^{\ddagger+}$ | 3 CAS 100A or $100 \mathrm{~B}^{\ddagger \dagger}$ | 3 |
| MATH 140 or 140E (GQ) ${ }^{* \pm \# \dagger}$ | 4 |  |
|  | 15 | 17 |


| Second Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| AE 202 | 3 AE 222 | 3 |
| AE 221 | 3 AE 240 | 3 |
| ARCH 130A | 3 ARCH 130B | 3 |
| EMCH 211 | 3 EMCH 213 | 3 |
| PHYS 213 | 2 PHYS 212 (PHYS 212L and | 4 |
|  | $212 R)(\text { GN })^{*}$ |  |

## Third Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| AE $308^{*}$ | 4 AE $311^{*}$ | 3 |
| AE 309 | 3 AE $372^{*}$ | 3 |
| AE 310 | 3 ARCH 100 or LARCH 60 (GA) | 3 |
| MATH 220 | 2 EMCH 212 | 3 |
| MATH 231 | 2 General Education Course | 3 |
| ME 201 | $3 \mathrm{GHW})^{\dagger}$ |  |
|  | $\mathbf{1 7}$ | $\mathbf{1 5}$ |

## Fourth Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| AE 404 | 3 AE 441 | 1 |
| AE 461 | 3 AE 466 | 3 |
| AE 464 | 3 AE 468 | 3 |
| AE 467 | 3 STAT 401 or IE 424 | 3 |
| ARCH 441 | 3 General Education Course | 3 |
|  | (GH) |  |
|  |  |  |


|  | Department Elective | 3 |
| :--- | ---: | ---: |
| 15 | 16 |  |

Fifth Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| AE 453 or 454 | 3 AE 482 | 4 |
| AE 481W | 4 Department Elective | 3 |
| ENGL 202C $(G W S)^{\ddagger \dagger}$ | 3 Department Elective | 3 |
| Department Elective | 3 General Education Course ${ }^{\dagger}$ | 3 |
| Department Elective | 3 General Education Course $^{\dagger}$ | 3 |
|  | $\mathbf{1 6}$ | $\mathbf{1 6}$ |

## Total Credits 160

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## College Notes:

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## Lighting/Electrical Option (3rd Year ETM): Architectural Engineering, B.A.E. at University Park Campus

Alternative Path: Direct Entry from ENGR to AE

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## First Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| AE 124 (or other First Year Seminar) ${ }^{\dagger}$ | 1 ARTH 202N (GA) (US/IL) ${ }^{\dagger}$ | 3 |
| CHEM 110 ${ }^{\text {*\#t }}$ | 3 EDSGN 100\# | 3 |
| CHEM 111 | 1 MATH 141 or 141E (GQ) ${ }^{\text {¹ \#\# } \dagger}$ | 4 |
| ECON 102 or 104 (GS) ${ }^{\dagger}$ | 3 PHYS 211 (PHYS 211L and 211R) (GN) ${ }^{\star \# t}$ | 4 |
| ENGL $15,30 \mathrm{H}$, or ESL 15 (GWS) ${ }^{\ddagger}$ | 3 CAS 100A or $100 \mathrm{~B}^{\ddagger \dagger}$ | 3 |
| MATH 140 or 140E (GQ) ${ }^{* \pm \# \dagger}$ | 4 |  |
|  | 15 | 17 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| ARCH 100 or LARCH 60 $(\mathrm{GA})^{\dagger}$ | 3 EMCH 212 | 3 |
| EMCH 211 | 3 EMCH 213 | 3 |
| ME 201 | 3 MATH 220 | 2 |
| MATH 250 | 3 MATH 231 | 2 |
| PHYS 212 (PHYS 212L and 212R) $(G N)^{\dagger}$ | 4 PHYS 213 | 2 |
|  | General Education Course (GHW) | 1.5 |
|  | General Education Course (GHW) | 1.5 |


|  | 16 | $\mathbf{1 5}$ |
| :--- | :---: | ---: |
| Third Year | Credits Spring | Credits |
| Fall | 3 AE 222 | 3 |
| AE 202 | 3 AE 240 | 3 |
| AE 221 | 4 AE 310* | 3 |
| AE 308* | 3 AE 311* | 3 |
| AE 309 | 3 AE 372* | 3 |
| ARCH 130A | ARCH 130B | 3 |
|  | $\mathbf{1 6}$ | 3 |
|  | $\mathbf{1 8}$ |  |

## Fourth Year

| Fall | Credits Spring | Credits |
| :--- | ---: | ---: |
| AE 404 | 3 AE 441 | 1 |
| AE 461 | 3 AE 466 | 3 |
| AE 464 | 3 AE 468 | 3 |


| AE 467 | 3 STAT 401 or IE 424 | 3 |
| :--- | :---: | ---: |
| ARCH 441 | 3 General Education Course | 3 |
|  | Department Elective | 3 |
|  | 15 | $\mathbf{1 6}$ |


| Fifth Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| AE 453 or 454 | 3 AE 482 | 4 |
| AE 481W | 4 Department Elective | 3 |
| ENGL 202C (GWS) ${ }^{\ddagger+}$ | 3 Department Elective | 3 |
| Department Elective | 3 General Education Course | 3 |
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## First Year

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| :---: | :---: | :---: |
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| CHEM 111 | 1 MATH 141 or 141E (GQ) ${ }^{\text {²\#\# }}$ | 4 |
| ECON 102 or 104 (GS) ${ }^{\dagger}$ | 3 PHYS 211 (PHYS 211L and 211R) (GN) ${ }^{\star \# t}$ | 4 |
| ENGL 15, 30H, or ESL 15 (GWS) ${ }^{\ddagger+}$ | 3 CAS 100A or $100 \mathrm{~B}^{\ddagger \dagger}$ | 3 |
| MATH 140 or 140E (GQ) ${ }^{\text {*) }}$ \# $\dagger$ | 4 |  |
|  | 15 | 17 |


| Second Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| AE 202 | 3 AE 240 | 3 |
| AE 221 | 3 AE 222 | 3 |
| ARCH 130A | 3 ARCH 130B | 3 |
| EMCH 211 | 3 EMCH 213 | 3 |
| MATH 250 | 3 PHYS 212 (PHYS 212L and | 4 |
|  | $212 \mathrm{R})(\mathrm{GN})^{\dagger}$ |  |

## Third Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| AE $308^{*}$ | 4 AE $311^{*}$ | 3 |
| AE 309 | 3 AE $372^{*}$ | 3 |
| AE $310^{*}$ | 3 ARCH 100 or LARCH 60 | 3 |
|  | $\left(\right.$ GA) ${ }^{+}$ |  |
| MATH 220 | 2 EMCH 212 | 3 |
| MATH 231 | 2 General Education Course | 3 |
| ME 201 | (GHW) |  |
|  | 3 | $\mathbf{1 5}$ |


| Fourth Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| AE 404 | 3 AE 455 | 3 |
| AE 441 | 1 AE 457 | 3 |
| AE 454 | 3 AE 458 | 3 |
| AE 453 | 3 ME 410 | 3 |
| ARCH 441 | 3 STAT 401 or IE 424 | 3 |


| ME 320 | 3 | $\mathbf{1 5}$ |
| :--- | :---: | ---: |
|  | 16 |  |
| Fifth Year |  | Credits |
| Fall | 3 AE 482 | 4 |
| AE 467 | 4 General Education Course | 3 |
| AE 481W | 3 General Education Course | 3 |
| ENGL 202C (GWS) |  |  |
| † | 3 General Education Course | 3 |
| Department Elective | 3 Department Elective | 3 |
| Department Elective | $\mathbf{1 6}$ | $\mathbf{1 6}$ |
|  |  |  |

## Total Credits 160

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- Some AE courses are offered every semester. To accommodate class size limitations, specific courses have been paired to permit students to interchange the semesters in which they enroll in these courses. These pairings are as follows: AE 240 and ME 201; AE 308 and AE 372; AE 310 and AE 311; ARCH 441 and (STAT 401 or IE 424).
- Fourth and Fifth-year AE courses are once a year in the semester shown in the above academic plan.
- Department Electives: Any 400 -level or 500 -level A E course is acceptable, except AE 401, AE 402, AE 404, AE 421, AE 422, and $A E 424$. For recommended $A E$ and other approved courses for each option, go to www.ae.psu.edu/academics/undergraduate/ electives.aspx (https://www.ae.psu.edu/academics/undergraduate/ electives.aspx) and click on "Department Elective Worksheet."
- Students who complete the ROTC Program may substitute 3 ROTC credits for the GHW requirement and 3 ROTC credits for a Department Elective.
- (ARCH 100 or LARCH 60) and ARTH 202 N are required GA courses.

Substitution by an advanced course is possible. See an adviser.

- ME 300 may be substituted for ME 201.


## Mechanical Option (3rd Year ETM): Architectural Engineering, B.A.E. at University Park Campus

Alternative Path: Direct Entry from ENGR to AE

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

## First Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| AE 124 (or other First Year Seminar) ${ }^{\dagger}$ | 1 ARTH 202N (GA) (US/IL) ${ }^{\dagger}$ | 3 |
| CHEM 110*\# ${ }^{\text {* }}$ | 3 EDSGN 100\# | 3 |
| CHEM 111 | 1 MATH 141 or 141E (GQ) ${ }^{\text {%\# }}$ + | 4 |
| ECON 102 or 104 (GS) ${ }^{\dagger}$ | 3 PHYS 211 (PHYS 211L and 211R) (GN) ${ }^{\star \# t}$ | 4 |
| ENGL 15, 30H, or ESL 15 (GWS) ${ }^{\ddagger}$ | 3 CAS 100A or $100 B^{\ddagger \dagger}$ | 3 |
| MATH 140 or 140E (GQ) ${ }^{*+\# \# \dagger}$ | 4 |  |
|  | 15 | 17 |
| Second Year |  |  |
| Fall | Credits Spring | Credits |
| ARCH 100 or LARCH 60 $(\mathrm{GA})^{\dagger}$ | 3 EMCH 212 | 3 |
| MATH 250 | 3 EMCH 213 | 3 |
| PHYS 212 (PHYS 212 L and PHYS 212R) (GN) ${ }^{\dagger}$ | 4 MATH 220 | 2 |
| ME 201 | 3 PHYS 213 | 2 |
| EMCH 211 | 3 MATH 231 | 2 |
|  | General Education Course (GHW) | 1.5 |
|  | General Education Course (GHW) | 1.5 |


|  | 16 | $\mathbf{1 5}$ |
| :--- | :---: | ---: |
| Third Year |  |  |
| Fall | Credits Spring | Credits |
| AE 202 | 3 AE 222 | 3 |
| AE 221 | 3 AE 240 | 3 |
| AE 308* | 4 AE 310* | 3 |
| AE 309 | 3 AE 311* | 3 |
| ARCH 130A | 3 AE 372 | 3 |
|  | ARCH 130B | 3 |
|  | $\mathbf{1 6}$ | $\mathbf{1 8}$ |

## Fourth Year

| Fall | Credits Spring | Credits |
| :--- | ---: | ---: |
| AE 404 | 3 AE 455 | 3 |
| AE 441 | 1 AE 457 | 3 |
| AE 454 | 3 AE 458 | 3 |


| AE 453 | 3 ME 410 | 3 |
| :--- | :---: | ---: |
| ARCH 441 | 3 STAT 401 or IE 424 | 3 |
| ME 320 | 3 | $\mathbf{1 5}$ |
|  | $\mathbf{1 6}$ | Credits |
| Fifth Year | Credits Spring | 4 |
| Fall | 3 AE 482 | 3 |
| AE 467 | 4 General Education Course | 3 |
| AE 481W | 3 General Education Course | 3 |
| ENGL 202C (GWS) |  |  |
| General Education Course | 3 Department Elective | 3 |
| Department Elective | 3 Department Elective | 3 |
|  | $\mathbf{1 6}$ | $\mathbf{1 6}$ |

## Total Credits 160

* Course requires a grade of C or better for the major
$\ddagger$ 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 $G Q$ ) require a grade of ' $C$ ' or better.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and satisfy a portion of that General Education requirement. If the student's program prescribes GWS these courses will replace both ENGL 15/ENGL 30H and CAS 100A/CAS 100B/CAS 100C. Each course is 3 credits.

## College Notes:

- Some AE courses are offered every semester. To accommodate class size limitations, specific courses have been paired to permit students to interchange the semesters in which they enroll in these courses. These pairings are as follows: AE 240 and ME 201; AE 308 and AE 372; AE 310 and AE 311; ARCH 441 and (STAT 401 or IE 424).
- Fourth and Fifth-year AE courses are once a year in the semester shown in the above academic plan.
- Department Electives: Any 400 -level or 500 -level A E course is acceptable, except AE 401, AE 402, AE 404, AE 421, AE 422, and AE 424. For recommended $A E$ and other approved courses for each option, go to www.ae.psu.edu/academics/undergraduate/ electives.aspx (https://www.ae.psu.edu/academics/undergraduate/ electives.aspx) and click on "Department Elective Worksheet."
- Students who complete the ROTC Program may substitute 3 ROTC credits for the GHW requirement and 3 ROTC credits for a Department Elective.
- (ARCH 100 or LARCH 60) and ARTH 202N are required GA courses. Substitution by an advanced course is possible. See an adviser.
- ME 300 may be substituted for ME 201.


## Structural Option (2nd Year ETM): Architectural Engineering, B.A.E. at University Park Campus

Standard Path: Direct Entry from ENGAE to AE

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

| First Year |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| AE 124 (or First Year Seminar) ${ }^{\dagger}$ | 1 ARTH 202N (GA) (US/IL) ${ }^{\dagger}$ | 3 |
| CHEM 110** | 3 EDSGN 100\# | 3 |
| CHEM 111 | 1 MATH 141 or 141E (GQ) ${ }^{\text {¹\#\# }}$ | 4 |
| ECON 102 or 104 (GS) ${ }^{\dagger}$ | 3 PHYS 211 (PHYS 211L and 211R) (GN) ${ }^{\star \# t}$ | 4 |
| ENGL $15,30 \mathrm{H}$, or ESL 15 (GWS) ${ }^{\ddagger}$ | 3 CAS 100A or $100 \mathrm{~B}^{\ddagger \dagger}$ | 3 |
| MATH 140 or 140E (GQ) ${ }^{\text {* } \ddagger \# \dagger}$ | 4 |  |
|  | 15 | 17 |


| Second Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| AE 202 | 3 AE 222 | 3 |
| AE 221 | 3 AE 240 | 3 |
| ARCH 130A | 3 ARCH 130B | 3 |
| EMCH 211 | 3 EMCH 213 | 3 |
| MATH 250 | 3 PHYS 212 (PHYS 212L and | 4 |
|  | $212 R)(\text { GN })^{\dagger}$ |  |
| PHYS 213 | 2 | $\mathbf{1 6}$ |

$\left.\begin{array}{lcr}\text { Third Year } & & \text { Credits } \\ \text { Fall } & \text { Credits Spring } & 3 \\ \text { AE } 308^{*} & 4 \text { AE } 311^{*} & 3 \\ \text { AE } 309 & 3 \text { AE } 372^{*} & 3 \\ \hline \text { AE } 310^{*} & 3 \text { ARCH } 100 \text { or LARCH } 60 & \\ & (\text { GA) }\end{array}\right)$

## Fourth Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| AE 401 | 3 AE 403 | 3 |
| AE 402 | 3 AE 405 | 4 |
| AE 430 | 3 AE 431 | 3 |
| ARCH 441 | 3 AE 441 | 1 |
| General Education Course | 3 STAT 401 or IE 424 | 3 |


|  | Department Elective |
| :--- | ---: |

Fifth Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| AE 481W | 4 AE 482 | 4 |
| CE 209 | 2 General Education Course | 3 |
| EMCH 315 | 2 General Education Course | 3 |
| EMCH 316 | 1 Department Elective | 3 |
| ENGL 202C $(\text { GWS })^{\ddagger \dagger}$ | 3 Department Elective | 3 |
| Department Elective | 3 |  |
|  | $\mathbf{1 5}$ | $\mathbf{1 6}$ |

## Total Credits 160

* Course requires a grade of C or better for the major
$\ddagger$ 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).
$\mathrm{W}, \mathrm{M}, \mathrm{X}$, 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 $G Q$ ) require a grade of ' $C$ ' or better.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and satisfy a portion of that General Education requirement. If the student's program prescribes GWS these courses will replace both ENGL 15/ENGL 30H and CAS 100A/CAS 100B/CAS 100C. Each course is 3 credits.

## College Notes:

- Some AE courses are offered every semester. To accommodate class size limitations, specific courses have been paired to permit students to interchange the semesters in which they enroll in these courses. These pairings are as follows: AE 240 and ME 201; AE 308 and AE 372; AE 310 and AE 311; ARCH 441 and (STAT 401 or IE 424).
- Fourth and Fifth-year AE courses are once a year in the semester shown in the above academic plan.
- Department Electives: Any 400 -level or 500 -level A E course is acceptable, except AE 401, AE 402, AE 404, AE 421, AE 422, and AE 424. For recommended AE and other approved courses for each option, go to www.ae.psu.edu/academics/undergraduate/ electives.aspx (https://www.ae.psu.edu/academics/undergraduate/ electives.aspx) and click on "Department Elective Worksheet."
- Students who complete the ROTC Program may substitute 3 ROTC credits for the GHW requirement and 3 ROTC credits for a Department Elective.
- (ARCH 100 or LARCH 60) and ARTH 202N are required GA courses. Substitution by an advanced course is possible. See an adviser.
- ME 300 may be substituted for ME 201.


## Structural Option (3rd Year ETM): Architectural Engineering, B.A.E. at University Park Campus

Alternative Path: Direct Entry from ENGR to AE

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

## First Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| AE 124 (or other First Year Seminar) ${ }^{\dagger}$ | 1 ARTH 202N (GA) (US/IL) ${ }^{\dagger}$ | 3 |
| CHEM 110*\# $\dagger$ | 3 EDSGN 100* | 3 |
| CHEM 111 | 1 MATH 141 or 141E (GQ) ${ }^{\star \ddagger \# \dagger}$ | 4 |
| ECON 102 or 104 (GS) ${ }^{\dagger}$ | 3 PHYS 211 (PHYS 211L and 211R) (GN) ${ }^{\star \# \dagger}$ | 4 |
| ENGL 15, 30H, or ESL 15 (GWS) ${ }^{\ddagger}$ | 3 CAS 100A or $100 \mathrm{~B}^{\ddagger+}$ | 3 |
| MATH 140 or 140E (GQ) ${ }^{*+\# \dagger}$ | 4 |  |
|  | 15 | 17 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| ARCH 100 or LARCH 60 $(\mathrm{GA})^{\dagger}$ | 3 EMCH 212 | 3 |
| MATH 250 | 3 EMCH 213 | 3 |
| ME 201 | 3 MATH 220 | 2 |
| EMCH 211 | 3 MATH 231 | 2 |
| PHYS 212 (PHYS 212L and 212R) $(\mathrm{GN})^{\dagger}$ | 4 PHYS 213 | 2 |
|  | General Education Course (GHW) | 1.5 |
|  | General Education Course (GHW) | 1.5 |


|  | 16 | $\mathbf{1 5}$ |
| :--- | :---: | ---: |
| Third Year | Credits Spring | Credits |
| Fall | 3 AE 222 | 3 |
| AE 202 | 3 AE 240 | 3 |
| AE 221 | 4 AE 310* | 3 |
| AE 308* | 3 AE 311* | 3 |
| AE 309 | 3 AE 372* | 3 |
| ARCH 130A | ARCH 130B | 3 |
|  | 16 | 3 |
|  | $\mathbf{1 6}$ | $\mathbf{1 8}$ |

## Fourth Year

| Fall | Credits Spring | Credits |
| :--- | ---: | ---: |
| AE 401 | 3 AE 403 | 3 |
| AE 402 | 3 AE 405 | 4 |
| AE 430 | 3 AE 431 | 3 |


| ARCH 441 | 3 AE 441 | 1 |
| :--- | :--- | ---: |
| General Education Course | 3 STAT 401 or IE 424 | 3 |
|  | Department Elective | 3 |
|  | $\mathbf{1 5}$ | $\mathbf{1 7}$ |


| Fifth Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| AE 481W | 4 AE 482 | 4 |
| CE 209 | 2 General Education Course | 3 |
| EMCH 315 | 2 General Education Course | 3 |
| EMCH 316 | 1 Department Elective | 3 |
| ENGL 202C (GWS) | $3 \dagger$ | 3 Department Elective |

Total Credits 160

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

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All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and satisfy a portion of that General Education requirement. If the student's program prescribes GWS these courses will replace both ENGL 15/ENGL 30H and CAS 100A/CAS 100B/CAS 100C. Each course is 3 credits.

## College Notes:

- Some AE courses are offered every semester. To accommodate class size limitations, specific courses have been paired to permit students to interchange the semesters in which they enroll in these courses. These pairings are as follows: AE 240 and ME 201; AE 308 and AE 372; AE 310 and AE 311; ARCH 441 and (STAT 401 or IE 424).
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- (ARCH 100 or LARCH 60) and ARTH 202N are required GA courses. Substitution by an advanced course is possible. See an adviser.
- ME 300 may be substituted for ME 201.

