Major Map: Aerospace Engineering (Aeronautics) Bachelor of Science in Engineering (B.S.E.)
Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011


## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Hrs at ASU <br> $(30 \mathrm{~min})$ | Cumulative <br> GPA (2.00 <br> minimum $)$ | Major GPA <br> $(2.00 \mathrm{minimum}$ <br> GPA $)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56 \mathrm{~min})$ | Total Comm. College Hrs. (64 <br> Max) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)

Historical Awareness (H)

- First-Year Composition


## Additional Notes:

Major Map: Aerospace Engineering (Astronautics) Bachelor of Science in Engineering (B.S.E.)<br>Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011



Major Map: Aerospace Engineering (Astronautics) Bachelor of Science in Engineering (B.S.E.)

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min cum GPA.) | Total UD Hrs (45 <br> min) | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

## Major Map: Bioengineering -

Bachelor of Science in Engineering (B.S.E.)
Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011


Major Map：Bioengineering－
Bachelor of Science in Engineering（B．S．E．）
Ira A．Fulton Schools of Engineering｜Catalog Year：2010－2011

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT：106－120 CREDIT HOURS |  |  |  |  |  |
| \＃BME 490：Biomedical Engineering Capstone Design II | 4 | 囚 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃Technical Elective | 3 | 区 |  |  |  |
| \＃Technical Elective | 2 | 囚 |  |  |  |
| UD Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total UD Hrs（45 <br> $\mathrm{min})$ | Total Hrs at ASU <br> $(30 \mathrm{~min})$ | Cumulative <br> GPA（2．00 <br> minimum $)$ | Major GPA <br> $(2.00$ minimum <br> GPA $)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56 \mathrm{~min})$ | Total Comm．College Hrs．（64 <br> Max） |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）
－Mathematical Studies（MA）
－Computer／Statistics／Quantitative applications（CS）
－Humanities，Fine Arts，and Design（HU）
－Social and Behavioral Sciences（SB）
－Natural Science－Quantitative（SQ）
－Natural Science－General（SG）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First－Year Composition

## Additional Notes：

## Major Map: Chemical Engineering - <br> Bachelor of Science in Engineering (B.S.E.) <br> Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011



## Major Map: Chemical Engineering - <br> Bachelor of Science in Engineering (B.S.E.) <br> Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Hrs at ASU <br> $(30 \mathrm{~min})$ | Cumulative <br> GPA $(2.00$ <br> minimum $)$ | Major GPA <br> $(2.00$ minimum <br> GPA $)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56 \mathrm{~min})$ | Total Comm. College Hrs. (64 <br> Max $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)

Natural Science-General (SG)

- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

Major Map: Civil Engineering -<br>Bachelor of Science in Engineering (B.S.E.)<br>Ira A. Fulton Schools of Engineering \Catalog Year: 2010-2011



| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Requirement Notes |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Graduation Requirements Summary:

| Total Hours Regular Curriculum (120) | Total UD Hrs (45 min ) | Total Hrs at ASU (30 min) | Cumulative GPA <br> ( 2.00 minimum) | Major GPA (2.30 Min. CUM GPA in CEE 3XX, 2.30 min CUM GPA in CEE 4XX)) | Hrs Resident Credit for Academic Recognition ( 56 min ) | Total Comm. College Hrs. (64 Max) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

Major Map: Civil Engineering (Construction Engineering) Bachelor of Science in Engineering (B.S.E.)



| Course Subject and Title (courses in bold/shading are critical) | Hrs. | Upper Division | Transfer Course/Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT: 106-120 CREDIT HOURS |  |  |  |  |  |
| Select remaining 2 <br> \# CEE 281: Surveying (3 hrs) <br> \# CEE 412: Pavement Analysis and Design (3 hrs) OR \# CEE 483: <br> Highway Materials, Construction and Quality (3 hrs) <br> \# CEE 420: Steel Structures (3 hrs) OR \# CEE 421: Concrete <br> Structures ( 3 hrs ) <br> \# CEE 452: Foundation (3 hrs) <br> \# CEE 481: Civil Engineering Project (3 hrs) <br> \# Approved technical elective ( 3 hrs ) | 6 | 区 |  | Grade of C in each | \# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. NOTE: A maximum of two "D" grades are allowed in all 3 XX and 4 XX courses combined. |
| \#CEE 400: Earth Systems Engineering and Management (HU, H) OR Social \& Behavioral Science (SB) AND Cultural Diversity in the US (C) or Global Awareness (G) if CEE 400 completed | 3 | $\square$ |  | $\begin{aligned} & \text { Grade of } \mathrm{C} \text { in CEE } \\ & 400 \\ & \hline \end{aligned}$ |  |
| \# CEE 486: Integrated Civil Engineering Design (L) | 4 | 区 |  | Grade of C |  |
| Humanities, Fine Arts \& Design (HU) AND Cultural Diversity in the US (C) or Global Awareness (G) | 3 | $\square$ |  |  |  |

Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total UD Hrs (45 <br> min) | Total Hrs at ASU (30 <br> min) | Cumulative GPA <br> $(2.00$ minimum) | Major GPA (2.30 <br> Min. CUM GPA in <br> CEE 3XX, 2.30 min <br> CUM GPA in CEE <br> 4XX) | Hesident Credit <br> for Academic <br> Recognition <br> $(56$ min) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

Major Map: Civil Engineering (Environmental Engineering) Bachelor of Science in Engineering (B.S.E.)<br>Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011



| Course Subject and Title (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer Course/Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT: 106-120 CREDIT HOURS |  |  |  |  |  |
| Select remaining 2 Design/Technical Electives <br> \# CEE 440: Engineering Hydrology (3 hrs) <br> \# CEE 441: Water Resource Hydrology (3 hrs) <br> \# CEE 462: Unit Ops in Environmental Engineering (3 hrs) <br> \# CEE 466: San System Design (3 hrs) <br> \# CEE 467: Environmental Microbiology (3 hrs) <br> \# Approved Technical Elective (3 hrs) | 6 | 区 |  | Grade of C in each | \# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. NOTE: A maximum of two "D" grades are allowed in all 3 XX and 4 XX courses combined. |
| \# CEE 400: Earth Systems Engineering and Management (HU, H) OR <br> Social \& Behavioral Science (SB) AND Cultural Diversity in the US (C) or Global Awareness (G) if CEE 400 completed | 3 | $\square$ |  | Grade of C in CEE $400$ |  |
| \# CEE 486: Integrated Civil Engineering Design (L) | 4 | 区 |  | Grade of C |  |
| Humanities, Fine Arts \& Design (HU) AND Cultural Diversity in the US (C) or Global Awareness (G) | 3 | $\square$ |  |  |  |

Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Cumulative GPA <br> $(2.00$ minimum) | Major GPA (2.30 <br> Min. CUM GPA in <br> CEE 3XX, 2.30 min <br> CUM GPA in CEE <br> $4 X X))$ | Hrs Resident Credit <br> for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

# Major Map: Computer Science - <br> Bachelor of Science (B.S.) 

Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011


Major Map: Computer Science -
Bachelor of Science (B.S.)
Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011

| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Requirement Notes |
| :--- | :---: | :---: | :--- | :--- | :--- | :--- |

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Hrs at ASU <br> $(30 \mathrm{~min})$ | Cumulative <br> GPA (2.00 <br> minimum) | Major GPA <br> $(2.00 \mathrm{minimum}$ <br> GPA $)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56 \mathrm{~min})$ | Total Comm. College Hrs. (64 <br> Max) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

Major Map：Computer Systems Engineering－ Bachelor of Science in Engineering（B．S．E．）

|  |  |  | Competed T $\square$ MAPP | fer Pathway： <br> $\square$ ATP $\square$ None | Completed General Education： <br> $\square$ AGEC $\square \mathrm{IGETC} / \mathrm{CSUGE} \square$ None |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE：0－15 CREDIT HOURS |  |  |  |  |  |
| ASU 101－FSE：The ASU Experience | 1 | $\square$ |  |  | －Complete CSE 100 or 110，101；MAT 265 each with a minimum grade of＂C＂ <br> －ASU 101－FSE should be completed first semester． <br> －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． <br> －Maintain minimum ASU cumulative GPA of 2.0 |
| \＃CSE 100：Principles of Programming with C＋＋（CS）OR <br> \＃CSE 110：Principles of Programming with Java（CS） | 3 | $\square$ |  | Grade of C |  |
| \＃CSE 101：Introduction to Computer Science \＆Engineering | 2 | $\square$ |  | Grade of C |  |
| MAT 265：Calculus for Engineers I（MA） | 3 | $\square$ |  | Grade of C |  |
| ENG 101 or 102：First－Year Composition OR ENG 105：Advanced First－Year Composition＊＊OR ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO：16－30 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 120：Digital Design Fundamentals | 3 | $\square$ |  | Grade of C | －Maintain minimum ASU cumulative GPA of 2.0 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． |
| \＃CSE 205：Object－Oriented Programming \＆Data Structures（CS） | 3 | $\square$ |  | Grade of C |  |
| MAT 266：Calculus for Engineers II | 3 | $\square$ |  | Grade of C |  |
| BIO 187：General Biology I（SQ）OR <br> BIO 188：General Biology Laboratory II（SQ） | 4 | $\square$ |  |  |  |
| ENG 101 or 102：First－Year Composition OR ENG 105：Advanced First－Year Composition＊＊OR ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| TERM THREE：31－45 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 230：Computer Organization and Assembly Language Programming | 3 | $\square$ |  | Grade of C | －Complete 9 critical courses by end of term 3 <br> －Maintain minimum ASU cumulative GPA of 2.0 <br> －Complete First－Year Composition requirement： ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． |
| MAT 243：Discrete Mathematical Structures | 3 | $\square$ |  | Grade of C |  |
| MAT 267：Calculus for Engineers III | 3 | $\square$ |  | Grade of C |  |
| PHY 121／122：University Physics I／Laboratory I（SQ） | 3／1 | $\square$ |  |  |  |
| TERM FOUR：46－60 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 220：Programming for Computer Engineering | 3 | $\square$ |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． |
| MAT 275：Modern Differential Equations | 3 | $\square$ |  |  |  |
| PHY 131／132：University Physics II Electricity and Magnetism／Laboratory II（SQ） | 3／1 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G），or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FIVE：61－75 CREDIT HOURS |  |  |  |  |  |
| \＃EEE 202：Circuits I | 4 | $\square$ |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． |
| \＃IEE 380：Probability and Statistics for Engineering Problem Solving | 3 | 区 |  |  |  |
| \＃CSE 301：Computing Ethics | 1 | 囚 |  | Grade of C |  |
| \＃CSE 310：Data Structures and Algorithms | 3 | 区 |  | Grade of C |  |
| \＃CSE 360：Introduction to Software Engineering | 3 | 区 |  | Grade of C |  |
| TERM SIX：76－90 CREDIT HOURS |  |  |  |  |  |
| \＃EEE 334：Circuits II | 4 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． |
| \＃CSE 320：Design and Synthesis of Digital Hardware | 3 | 区 |  | Grade of C |  |
| \＃CSE 325：Embedded Micro Systems | 3 | 区 |  | Grade of C |  |
| \＃MAT 343：Applied Linear Algebra | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SEVEN：91－105 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 423：Systems Capstone Project I（L） | 3 | 区 |  | Grade of C | －See Advisor for approved list of CSE Technical Electives <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． |
| \＃CSE 430：Operating Systems | 3 | 区 |  | Grade of C |  |
| \＃CSE Technical Elective | 3 | 区 |  | Grade of C |  |
| \＃CSE Technical Elective | 3 | 区 |  | Grade of C |  |
| UD Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | 区 |  |  |  |
| TERM EIGHT：106－120 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 420：Computer Architecture I | 3 | 区 |  | Grade of C | －See Advisor for approved list of CSE Technical Electives <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． |
| \＃CSE 424：Systems Capstone Project II（L） | 3 | 区 |  | Grade of C |  |
| \＃CSE 434：Computer Networks | 3 | 区 |  | Grade of C |  |
| \＃CSE Technical Elective | 3 | 区 |  | Grade of C |  |
| \＃CSE Technical Elective | 3 | 区 |  | Grade of C |  |

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Hrs at ASU <br> $(30 \mathrm{~min})$ | Cumulative <br> GPA (2.00 <br> minimum $)$ | Major GPA <br> $(2.00$ minimum <br> GPA $)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56 \mathrm{~min})$ | Total Comm. College Hrs. (64 <br> Max $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

Major Map: Construction (Concrete Industry
Management) - Bachelor of Science (B.S.)
Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011


Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> min) | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min. CUM GPA ) | Total UD Hrs (45 <br> min) | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)

Natural Science-General (SG)

- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

Major Map: Construction (Concrete Industry
Management) - Bachelor of Science (B.S.)
Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011


Page 1 of 2

Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min. CUM GPA $)$ | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)

Natural Science-General (SG)

- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

Major Map：Construction（General Building Construction）－ Bachelor of Science（B．S．）<br>Ira A．Fulton Schools of Engineering｜Catalog Year：2010－2011

|  |  |  | Competed Transfer Pathway： |  | Completed General Education： $\square$ AGEC $\square$ IGETC／CSUGE $\square$ None |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE：0－15 CREDIT HOURS |  |  |  |  |  |
| \＃ASU 101－FSE：The ASU Experience | 1 | $\square$ |  |  | －ASU 101－FSE should be completed first semester． <br> －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． <br> －Maintain minimum ASU cumulative GPA of 2.0 |
| MAT 265：Calculus for Engineers I（MA） | 3 | $\square$ |  | Grade of C |  |
| PHY 111／113：General Physics I／Laboratory I（SQ） | 3／1 | $\square$ |  | Grade of C |  |
| \＃CON 101：Construction \＆Culture：A Built Environment（HU，G， H） | 3 | $\square$ |  |  |  |
| \＃CON 100：Introduction to Construction | 2 | $\square$ |  |  |  |
| ENG 101 or 102：First－Year Composition OR ENG 105：Advanced First－Year Composition＊＊OR ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| TERM TWO：16－30 CREDIT HOURS |  |  |  |  |  |
| \＃CON 243：Heavy Construction Equipment，Methods，Materials | 3 | $\square$ |  | Grade of C | －Maintain minimum ASU cumulative GPA of 2.0 <br> －\＃Designates Major Course：A minimum cumulative GPA of 2.0 requiref in major courses |
| \＃CON 244 ：Working Drawing Analysis | 1 | $\square$ |  |  |  |
| \＃CON 252：Building Construction Methods，Materials， Equipment | 3 | $\square$ |  |  |  |
| ECN 211：Macroeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| ENG 101 or 102：First－Year Composition OR ENG 105：Advanced First－Year Composition＊＊OR ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| TERM THREE：31－45 CREDIT HOURS |  |  |  |  |  |
| \＃CON 221：Applied Statics | 3 | $\square$ |  | Grade of C | －Complete 13 critical courses by end of term 3. <br> －Maintain minimum ASU cumulative GPA of 2.0 <br> －Complete First－Year Composition requirement： <br> ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 <br> \＃Designates Major Course：A minimum cumulative <br> GPA of 2.0 required in major courses |
| \＃CON 251：Microcomputer Applications for Construction | 3 | $\square$ |  |  |  |
| COM 225：Public Speaking（L） | 3 | $\square$ |  |  |  |
| ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| STP 226：Elements of Statistics（CS） | 3 | $\square$ |  |  |  |
| TERM FOUR：46－60 CREDIT HOURS |  |  |  |  |  |
| \＃CON 223：Strength of Materials | 3 | $\square$ |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃CON 271：Construction Safety | 3 | $\square$ |  |  |  |
| \＃CON 241：Surveying | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C） | 3 | $\square$ |  |  |  |
| Science Quantitative（SQ）or Science General（SG） | 4 | $\square$ |  |  |  |
| TERM SUMMER $2^{\text {nd }}$ Year： 1 CREDIT HOUR |  |  |  |  |  |
| \＃CON 296：Field Internship | 1 | $\square$ |  |  |  |
| TERM FIVE：61－75 CREDIT HOURS |  |  |  |  |  |
| \＃CON 310：Testing and Materials for Construction | 4 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required．Note：maximum of two＂D＂ grades are allowed in all 3 XX and 4 XX courses combined． |
| \＃CON 345：Mechanical Systems | 4 | $\boxtimes$ |  | Grade of C |  |
| \＃CON 273：Electrical Construction Fundamental and Project Management | 3 | $\square$ |  |  |  |
| \＃CON 383：Construction Estimating | 4 | 区 |  | Grade of C |  |
| Select 1 <br> \＃CON 472：Development Feasibility Reports（3 hrs） <br> \＃CON 483：Advanced Building Estimating（3 hrs） <br> REA 380：Real Estate Fundamentals（3 hrs） <br> Upper division Elective | 3 | 区 |  | Grade of C in CON courses |  |
| TERM SIX：76－90 CREDIT HOURS |  |  |  |  |  |
| \＃CON 389：Construction Cost Accounting and Control（CS） | 3 | 囚 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required．Note：maximum of two＂D＂ grades are allowed in all 3XX and 4XX courses combined． |
| LES 305：Legal，Ethical，Regulatory Issues in Business | 3 | 区 |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）or Social \＆ Behavioral Science（SB） | 3 | 区 |  |  |  |
| Upper division Elective | 3 | 区 |  |  |  |
| Select 1 additional course from： <br> \＃CON 472：Development Feasibility Reports（3 hrs） <br> \＃CON 483：Advanced Building Estimating（3 hrs） <br> REA 380：Real Estate Fundamentals（3 hrs） <br> Upper division Elective：（ 3 hrs ） | 3 | 区 |  | Grade of C in CON courses |  |
| TERM SUMMER $3^{\text {rd }}$ Year： 1 CREDIT HOUR |  |  |  |  |  |
| \＃CON 484：Internship | 1 | 区 |  | Grade of C |  |


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SEVEN：91－105 CREDIT HOURS |  |  |  |  |  |
| \＃CON 450：Geotechnical Applications for Construction | 3 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required．Note：maximum of two＂D＂ grades are allowed in all 3 XX and 4 XX courses combined． |
| \＃CON 453：Construction Project Management I | 4 | 囚 |  | Grade of C |  |
| \＃CON 495：Construction Planning and Scheduling（L） | 3 | 区 |  | Grade of C |  |
| Select 1 additional course from： <br> \＃CON 472：Development Feasibility Reports（3 hrs） <br> \＃CON 483：Advanced Building Estimating（3 hrs） <br> REA 380：Real Estate Fundamentals（3 hrs） <br> Upper division Elective（3 hrs） | 3 | 区 |  | Grade of C in CON courses |  |
| TERM EIGHT：106－120 CREDIT HOURS |  |  |  |  |  |
| \＃CON 424：Structural Design | 3 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required．Note：maximum of two＂D＂ grades are allowed in all 3 XX and 4 XX courses combined． |
| \＃CON 455：Construction Project Management II | 3 | 区 |  | Grade of C |  |
| \＃CON 496：Construction Contract Administration（L） | 3 | 区 |  | Grade of C |  |
| Select remaining course from： <br> \＃CON 472：Development Feasibility Reports（3 hrs） <br> \＃CON 483：Advanced Building Estimating（3 hrs） <br> REA 380：Real Estate Fundamentals（3 hrs） <br> UD Elective（3 hrs） | 3 | 区 |  | Grade of C in CON courses |  |

Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total Hrs at ASU（30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA（2．000 <br> Min．CUM GPA ） | Total UD Hrs（45 <br> $\mathrm{min})$ | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）
－Mathematical Studies（MA）
－Computer／Statistics／Quantitative applications（CS）
－Humanities，Fine Arts，and Design（HU）
－Social and Behavioral Sciences（SB）
－Natural Science－Quantitative（SQ）
－Natural Science－General（SG）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First－Year Composition
Additional Notes：

## Major Map: Construction (Heavy Construction) Bachelor of Science (B.S.) <br> Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011



Major Map：Construction（Heavy Construction）－ Bachelor of Science（B．S．）<br>Ira A．Fulton Schools of Engineering｜Catalog Year：2010－2011

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM SUMMER $3^{\text {rd }}$ Year： 1 CREDIT HOUR |  |  |  |  |  |
| \＃CON 484：Internship | 1 | 区 |  | Grade of C |  |
| TERM SEVEN：91－105 CREDIT HOURS |  |  |  |  |  |
| \＃CON 450：Geotechnical Applications for Construction | 3 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses．Note：maximum of two＂D＂grades are allowed in all 3XX and 4XX courses combined． |
| \＃CON 453：Construction Project Management I | 4 | 区 |  | Grade of C |  |
| \＃CON 495：Construction Planning and Scheduling | 3 | 区 |  | Grade of C |  |
| ```Select 1 additional: \# CON 394: Special Topics: Advanced Heavy Equipment Operations (3 hrs) \# CON 394: Special Topics: Environmental Aspects of Heavy Construction (3 hrs) \# CON 486: Heavy Construction Estimating (3 hrs) \# CON 494: Special Topics: Heavy Construction Earthworks (3 hrs) \# CON 494: Special Topics: Heavy Construction Project Management (3 hrs):``` | 3 | 区 |  | Grade of C |  |
| TERM EIGHT：106－120 CREDIT HOURS |  |  |  |  |  |
| \＃CON 424：Structural Design | 3 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses．Note：maximum of two＂D＂grades are allowed in all 3XX and 4XX courses combined． |
| \＃CON 455：Construction Project Management II | 3 | 囚 |  | Grade of C |  |
| \＃CON 496：Construction Contract Administration（L） | 3 | 区 |  | Grade of C |  |
| Select remaining course： <br> \＃CON 394：Special Topics：Advanced Heavy Equipment Operations （3 hrs） <br> \＃CON 394：Special Topics：Environmental Aspects of Heavy <br> Construction（3 hrs） <br> \＃CON 486：Heavy Construction Estimating（3 hrs） <br> \＃CON 494：Special Topics：Heavy Construction Earthworks（3 hrs） <br> \＃CON 494：Special Topics：Heavy Construction Project Management <br> （3 hrs）： | 3 | 区 |  | Grade of C |  |

## Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total Hrs at ASU（30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA（2．000 <br> Min．CUM GPA $)$ | Total UD Hrs（45 <br> $\mathrm{min})$ | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）
－Mathematical Studies（MA）
－Computer／Statistics／Quantitative applications（CS）
－Humanities，Fine Arts，and Design（HU）
－Social and Behavioral Sciences（SB）
－Natural Science－Quantitative（SQ）
－Natural Science－General（SG）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First－Year Composition

## Additional Notes：

Major Map：Construction（Residential Construction）－ Bachelor of Science（B．S．）<br>Ira A．Fulton Schools of Engineering｜Catalog Year：2010－2011

|  |  |  | Competed Transfer Pathway： |  | Completed General Education： <br> $\square$ AGEC $\square$ IGETC／CSUGE $\square$ None |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \end{aligned}$ | Additional Critical Requirement Notes |
| TERM ONE：0－15 CREDIT HOURS |  |  |  |  |  |
| \＃ASU 101－FSE：The ASU Experience | 1 | $\square$ |  |  | －ASU 101－FSE should be completed first semester． <br> －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> －${ }^{* *}$ If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． <br> －Maintain minimum ASU cumulative GPA of 2.0 |
| MAT 265：Calculus for Engineers I（MA） | 3 | $\square$ |  | Grade of C |  |
| PHY 111／113：General Physics I／Laboratory I（SQ） | 3／1 | $\square$ |  | Grade of C |  |
| \＃CON 101：Construction \＆Culture：A Built Environment（HU，G， H） | 3 | $\square$ |  |  |  |
| \＃CON 100：Introduction to Construction | 2 | $\square$ |  |  |  |
| ENG 101 or 102：First－Year Composition OR ENG 105：Advanced First－Year Composition＊＊OR ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| TERM TWO：16－30 CREDIT HOURS |  |  |  |  |  |
| \＃CON 243：Heavy Construction Equipment，Methods，Materials | 3 | $\square$ |  | Grade of C | －Maintain minimum ASU cumulative GPA of 2.0 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． |
| \＃CON 244：Working drawing Analysis | 1 | $\square$ |  |  |  |
| \＃CON 252：Building Construction Methods，Materials， Equipment | 3 | $\square$ |  |  |  |
| ECN 211：Macroeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| ENG 101 or 102：First－Year Composition OR ENG 105：Advanced First－Year Composition＊＊OR ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| TERM THREE：31－45 CREDIT HOURS |  |  |  |  |  |
| \＃CON 221：Applied Statics | 3 | $\square$ |  | Grade of C | －Complete 14 critical courses by end of term 3. <br> －Maintain minimum ASU cumulative GPA of $\mathbf{2 . 0}$ <br> －Complete First－Year Composition requirement：ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． |
| \＃CON 251：Microcomputer Applications for Construction | 3 | $\square$ |  |  |  |
| COM 225：Public Speaking（L） | 3 | $\square$ |  |  |  |
| ECN 212：Microeconomic Principles（SB） | 3 | $\square$ |  |  |  |
| STP 226：Elements of Statistics（CS） | 3 | $\square$ |  |  |  |
| TERM FOUR：46－60 CREDIT HOURS |  |  |  |  |  |
| \＃CON 223：Strength of Materials | 3 | $\square$ |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． |
| \＃CON 271：Construction Safety | 3 | $\square$ |  |  |  |
| \＃CON 241：Surveying | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C） | 3 | $\square$ |  |  |  |
| Science Quantitative（SQ）or Science General（SG） | 4 | $\square$ |  |  |  |
| TERM SUMMER ${ }^{\text {nd }}$（ Year： 1 CREDIT HOUR |  |  |  |  |  |
| \＃CON 296：Field Internship | 1 | $\square$ |  |  |  |
| TERM FIVE：61－75 CREDIT HOURS |  |  |  |  |  |
| \＃CON 310：Testing and Materials for Construction | 4 | 区 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． Note：maximum of two＂D＂grades are allowed in all 3 XX and 4XX courses combined． |
| \＃CON 345：Mechanical Systems | 4 | ® |  | Grade of C |  |
| \＃CON 273：Electrical Construction Fundamental and Project <br> Management | 3 | $\square$ |  |  |  |
| \＃CON 383：Construction Estimating | 4 | 区 |  | Grade of C |  |
| ```Select 1 \# CON 377: Residential Construction Production Procedures (3 hrs) \# CON 477: Residential Construction Business Practices ( 3 hrs ) REA 380: Real Estate Fundamentals (3 hrs) Upper division elective ( 3 hrs )``` | 3 | 区 |  | Grade of C in CON courses |  |
| TERM SIX：76－90 CREDIT HOURS |  |  |  |  |  |
| \＃CON 389：Construction Cost Accounting and Control（CS） | 3 | 囚 |  | Grade of C | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses． Note：maximum of two＂D＂grades are allowed in all 3XX and 4XX courses combined． |
| LES 305：Legal，Ethical，Regulatory Issues in Business | 3 | 区 |  |  |  |
| Select 1 additional course from： <br> \＃CON 377：Residential Construction Production Procedures（3 hrs） <br> \＃CON 477：Residential Construction Business Practices（ 3 hrs ） <br> REA 380：Real Estate Fundamentals（3 hrs） <br> Upper division elective（ 3 hrs ） | 3 | 区 |  | Grade of C in CON courses |  |
| Upper division Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | 囚 |  |  |  |
| Upper division Elective | 3 | 区 |  |  |  |
| TERM SUMMER $3^{\text {rd }}$ Year： 1 CREDIT HOUR |  |  |  |  |  |
| \＃CON 484：Internship | 1 | 囚 |  | Grade of C |  |


| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade <br> if Required | Additional Critical Requirement Notes |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- | :--- |

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min. CUM GPA $)$ | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

Major Map: Construction (Specialty Construction) Bachelor of Science (B.S.)<br>Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011



| Course Subject and Title <br> (courses in bold/shading are critical) | Hrs. | Upper <br> Division | Transfer <br> Course/Grade | Minimum Grade if <br> Required | Additional Critical Requirement Notes |
| :--- | :---: | :---: | :---: | :---: | :--- | :--- |

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min. CUM GPA $)$ | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:

Literacy and Critical Inquiry (L)

- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

## 1 TiArizona State <br> UNIVERSITY

Major Map: Electrical Engineering -
Bachelor of Science in Engineering (B.S.E.)
Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011


Major Map: Electrical Engineering Bachelor of Science in Engineering (B.S.E.) Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Hrs at ASU <br> $(30 \mathrm{~min})$ | Cumulative <br> GPA (2.00 <br> minimum) | Major GPA <br> $(2.00$ minimum <br> GPA $)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56 \mathrm{~min})$ | Total Comm. College Hrs. (64 <br> Max) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

Major Map: Electrical Engineering (Electric Power and Energy Systems) Bachelor of Science in Engineering (B.S.E.) Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | $\begin{aligned} & \text { Minimum Grade if } \\ & \text { Required } \\ & \hline \end{aligned}$ | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT：106－120 CREDIT HOURS |  |  |  |  | －See Degree Audit Reporting System（DARS）for approved list of Technical Electives \＃Designates Major course：A minimum cumulative GPA of 2.0 required in major courses． |
| \＃EEE 489：Senior Design Laboratory II（L） | 3 | 囚 |  |  | －See Degree Audit Reporting System（DARS）for approved list of Technical Electives <br> \＃Designates Major course：A minimum cumulative GPA of 2.0 required in major courses． |
| Select 1 not previously selected： <br> \＃EEE 460：Nuclear Concepts for the $21^{\text {st }}$ Century（ 3 hrs ） <br> \＃EEE 463：Electrical Power Plant（3 hrs） <br> \＃EEE 470：Electric Power Devices（3 hrs） <br> \＃EEE 471：Power System Analysis（3 hrs） <br> \＃EEE 473：Electrical Machinery（3 hrs） <br> \＃EEE 498：Pro－Seminar（Power Elec．）（3 hrs） <br> \＃EEE 498：Pro－Seminar（Solar Energy）（3 hrs） | 3 | 区 |  |  |  |
| \＃Technical Elective | 3 | 囚 |  |  |  |
| \＃Technical Elective | 3 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science（SB） | 3 | $\square$ |  |  |  |

## Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total UD Hrs（45 <br> $\mathrm{min})$ | Total Hrs at ASU <br> $(30 \mathrm{~min})$ | Cumulative <br> GPA（2．00 <br> minimum） | Major GPA <br> $(2.00$ minimum <br> GPA $)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56 \mathrm{~min})$ | Total Comm．College Hrs．（64 <br> Max $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
－Literacy and Critical Inquiry（L）
－Mathematical Studies（MA）
－Computer／Statistics／Quantitative applications（CS）
－Humanities，Fine Arts，and Design（HU）
－Social and Behavioral Sciences（SB）
－Natural Science－Quantitative（SQ）
－Natural Science－General（SG）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First－Year Composition

## Additional Notes：

Major Map: Engineering Special Studies<br>(Pre-medical Engineering) -<br>Bachelor of Science in Engineering (B.S.E.)<br>Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011



Major Map: Engineering Special Studies
(Pre-medical Engineering) -
Bachelor of Science in Engineering (B.S.E.)
Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min. CUM GPA $)$ | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)

Natural Science-General (SG)

- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

Major Map: Industrial Engineering -
Bachelor of Science in Engineering (B.S.E.)
Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011


Major Map: Industrial Engineering -
Bachelor of Science in Engineering (B.S.E.)
Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Hrs at ASU <br> $(30 \mathrm{~min})$ | Cumulative <br> GPA (2.00 <br> minimum) | Major GPA <br> $(2.00$ minimum <br> GPA $)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56 \mathrm{~min})$ | Total Comm. College Hrs. (64 <br> Max) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

Major Map：Informatics－
Bachelor of Science（B．S．）
Ira A．Fulton Schools of Engineering｜Catalog Year：2010－2011

|  |  |  | Competed Transfer Pathway： |  | Completed General Education： $\square$ AGEC $\square$ IGETC／CSUGE $\square$ None |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hr | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE：0－15 CREDIT HOURS |  |  |  |  |  |
| ASU 101－FSE：The ASU Experience | 1 | $\square$ |  |  | －ASU 101－FSE should be completed first semester． <br> －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> ＊＊If ENG 105，a 3 hr applicable elective must also be taken prior to graduation．See Advisor． \＃Designates Core Course：A minimum cumulative GPA of 2.50 required in core courses． （NOTE：An additional HU／SB can be move up to Term 1，or any deficiency courses can be added） |
| \＃CPI 101：Intro to Informatics（CS） | 3 | $\square$ |  | Grade of C |  |
| \＃CSE 110：Principles of Programming with Java（CS） | 3 | $\square$ |  | Grade of C |  |
| ENG 101 or 102：First－Year Composition OR <br> ENG 105：Advanced First－Year Composition＊＊OR <br> ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US（C）， Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO：16－30 CREDIT HOURS |  |  |  |  |  |
| \＃CSE 205：Object Oriented Programming and Data Structures（CS） | 3 | $\square$ |  | Grade of C | \＃Designates Core Course：A minimum cumulative GPA of 2.50 required in core courses． |
| \＃MAT 210：Brief Introduction to Calculus（MA）or <br> \＃MAT 265：Calculus for Engineers I（MA） | 3 | $\square$ |  | Grade of C |  |
| \＃CPI 200：Mathematical Foundations of Informatics（MA） | 3 | $\square$ |  | Grade of C |  |
| ENG 101 or 102：First－Year Composition OR <br> ENG 105：Advanced First－Year Composition＊＊OR <br> ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM THREE：31－45 CREDIT HOURS |  |  |  |  |  |
| \＃IEE 305：Information Systems Engineering（CS） | 3 | 区 |  | Grade of C | －Complete all 6 critical courses each with a minimum grade of $\mathbf{C}$ ． <br> －Complete First－Year Composition requirement： ENG 101 \＆ 102 or ENG 107 \＆ 108 or ENG 105 <br> －See advisor for approved list of Informatics Electives <br> \＃Designates Core Course：A minimum cumulative GPA of 2.50 required in core courses． \＃\＃Designates Focal Area \＆Informatics Elective： A minimum cumulative GPA of 2.50 required in focus area courses and informatics electives． |
| \＃MAT 242：Linear Algebra（MA） | 2 | $\square$ |  | Grade of C |  |
| \＃\＃Informatics Elective | 3 | $\square$ |  | Grade of C |  |
| Literacy \＆Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Laboratory Science（SG） | 4 | $\square$ |  |  |  |
| TERM FOUR：46－60 CREDIT HOURS |  |  |  |  |  |
| \＃CPI 310：Information and Data Management | 3 | 区 |  | Grade of C | －See advisor for approved list of Informatics Electives <br> \＃Designates Core Course：A minimum cumulative GPA of 2.50 required in core courses． \＃\＃Designates Focal Area \＆Informatics Elective： A minimum cumulative GPA of 2.50 required in focus area courses and informatics electives． |
| Laboratory Science（SQ） | 4 | $\square$ |  |  |  |
| \＃MAT 243：Discrete Mathematical Structures | 3 | $\square$ |  | Grade of C |  |
| \＃\＃Informatics Elective | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US（C）， Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FIVE：61－75 CREDIT HOURS |  |  |  |  |  |
| \＃CPI 360：Decision Making and Problem Solving | 3 | 区 |  | Grade of C | －See advisor for approved list of Informatics Electives <br> \＃Designates Core Course：A minimum cumulative GPA of 2.50 required in core courses． \＃\＃Designates Focal Area \＆Informatics Elective： A minimum cumulative GPA of 2.50 required in focus area courses and informatics electives． |
| \＃STP 420：Introductory Applied Statistics（CS）OR \＃STP 231：Statistics for the Life Sciences（CS）OR \＃GCU 495：Quantitative Methods in Geography（CS）OR \＃IEE 380：Probability \＆Statistics for Engineering Problem Solving（CS） | 3 | $\square$ |  | Grade of C |  |
| \＃\＃Informatics Elective | 3 | $\square$ |  | Grade of C |  |
| \＃\＃Informatics Elective | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SIX：76－90 CREDIT HOURS |  |  |  |  |  |
| \＃CPI 350／394：Evaluation of Informatics Systems | 3 | 区 |  | Grade of C | \＃Designates Core Course：A minimum cumulative GPA of 2.50 required in core courses． \＃\＃Designates Focal Area \＆Informatics Elective： A minimum cumulative GPA of 2.50 required in focus area courses and informatics electives． |
| \＃CSE 463：Introduction to Human Computer Interaction | 3 | 区 |  | Grade of C |  |
| \＃\＃Informatics Elective | 3 | $\square$ |  | Grade of C |  |
| \＃\＃Informatics Elective | 3 | $\square$ |  | Grade of C |  |
| Upper Division Humanities，Fine Arts \＆Design（HU）OR Social \＆ Behavioral Science（SB） | 3 | 区 |  |  |  |
| TERM SEVEN：91－105 CREDIT HOURS |  |  |  |  |  |
| \＃CPI 485／494：Informatics Capstone I（L） | 3 | 区 |  | Grade of C | －See advisor for approved list of Informatics Electives <br> \＃Designates Core Course：A minimum cumulative GPA of 2.50 required in core courses． \＃\＃Designates Focal Area \＆Informatics Elective： A minimum cumulative GPA of 2.50 required in focus area courses and informatics electives． |
| \＃\＃Focus Area Required Course | 3 | 区 |  | Grade of C |  |
| \＃\＃Focus Area Required Course | 3 | 区 |  | Grade of C |  |
| \＃\＃Focus Area Required Course | 3 | 区 |  | Grade of C |  |
| \＃\＃Informatics Elective | 3 | $\square$ |  | Grade of C |  |


| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM EIGHT：106－120 CREDIT HOURS |  |  |  |  |  |
| \＃\＃CPI 486／494：Informatics Capstone I（L） | 4 | 区 |  | Grade of C | \＃\＃Designates Focal Area \＆Informatics Elective： A minimum cumulative GPA of 2.50 required in focus area courses and informatics electives． |
| \＃\＃Focus Area Required Course | 3 | 区 |  | Grade of C |  |
| \＃\＃Focus Area Required Course | 3 | 区 |  | Grade of C |  |
| \＃\＃Upper Division Informatics Elective | 3 | 区 |  | Grade of C |  |
| \＃\＃Upper Division Informatics Elective | 3 | 区 |  | Grade of C |  |

## Graduation Requirements Summary：

| Total Hours Regular <br> Curriculum（120） | Total UD Hrs（45 min） | Total Hrs at ASU（30 <br> $\mathrm{min})$ | Cumulative GPA（2．00 <br> minimum） | Major GPA（2．00 <br> minimum GPA $)$ | Hrs Resident Credit for <br> Academic Recognition <br> （56 min） | Total Comm．College <br> Hrs．（64 Max） |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## General University Requirements：Legend

－Literacy and Critical Inquiry（L）
－Mathematical Studies（MA）
－Computer／Statistics／Quantitative applications（CS）
－Humanities，Fine Arts，and Design（HU）
－Social and Behavioral Sciences（SB）
－Natural Science－Quantitative（SQ）

## Additional Notes：

－Natural Science－General（SG）
－General Studies Awareness Requirements －Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First－Year Composition

Major Map：Materials Science and Engineering－ Bachelor of Science in Engineering（B．S．E．）<br>Ira A．Fulton Schools of Engineering｜Catalog Year：2010－2011

|  |  |  | Competed Transfer Pathway： |  | Completed General Education： $\square \mathrm{AGEC} \square \mathrm{IGETC} / \mathrm{CSUGE} \quad \square$ None |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | Upper Division | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE：0－15 CREDIT HOURS |  |  |  |  |  |
| ASU 101－FSE：The ASU Experience | 1 | $\square$ |  |  | －ASU 101－FSE should be completed first semester． <br> －Minimum CUM ASU 2．0 GPA required <br> －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course <br> ＊＊If ENG 105 a 3 hr applicable elective must also be taken prior to graduation．See Advisor． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses <br> －Maintain minimum ASU cumulative GPA of 2.0 |
| CHM 114：General Chemistry for Engineers（SQ）OR CHM 113／116 ：General Chemistry I／General Chemistry II（SQ） | 4 | $\square$ |  |  |  |
| MAT 265：Calculus for Engineers I | 3 | $\square$ |  | Grade of C |  |
| \＃MSE 100：Introduction of Materials Engineering | 2 | $\square$ |  |  |  |
| ENG 101 or 102：First－Year Composition OR ENG 105：Advanced First－Year Composition＊＊OR ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US（C）， Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM TWO：16－30 CREDIT HOURS |  |  |  |  |  |
| MAT 266：Calculus for Engineers II（MA） | 3 | $\square$ |  | Grade of C | －Maintain minimum ASU cumulative GPA of 2.0 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses |
| \＃MSE 250：Structure and Properties of Materials | 3 | $\square$ |  | Grade of C |  |
| PHY 121／122：University Physics I／Laboratory I（SQ） | 3／1 | $\square$ |  |  |  |
| ENG 101 or 102：First－Year Composition OR ENG 105：Advanced First－Year Composition＊＊OR ENG 107 or 108：English for Foreign Students | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM THREE：31－45 CREDIT HOURS |  |  |  |  |  |
| MAT 267：Calculus for Engineers III（MA） | 3 | $\square$ |  | Grade of C | －Complete 10 critical courses（includes labs）by end of term 3 <br> －Maintain minimum ASU cumulative GPA of 2.0 <br> －Complete First－Year Composition requirement： ENG 101 \＆ 102 OR ENG 107 \＆ 108 or ENG 105 <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses |
| PHY 131／132：University Physics II Electricity and Magnetism／Laboratory II（SQ） | 3／1 | $\square$ |  |  |  |
| BME 111：Engineering Perspectives on Biological Systems | 3 | $\square$ |  |  |  |
| \＃MSE 215：Materials Synthesis | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Science（SB）AND Cultural Diversity in the US（C）， Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM FOUR：46－60 CREDIT HOURS |  |  |  |  |  |
| MAT 275：Modern Differential Equations（MA） | 3 | $\square$ |  |  | －Minimum CUM ASU 2．0 GPA required <br> －MSE 250 must be completed with a minimum grade of＂$C$＂． <br> \＃Designates Major Course：A minimum cumulative GPA of 2.0 required in major courses <br> －The advanced science elective includes most 200－ level and above math／science courses．See Advisor for approved advanced science electives． |
| MAT 343：Applied Linear Algebra | 3 | 区 |  |  |  |
| \＃MSE 211：Introduction to Mechanics of Materials | 3 | $\square$ |  |  |  |
| IEE 220：Business／Industrial Engineering | 3 | $\square$ |  |  |  |
| \＃Advanced Science Elective | 3 | 区 |  |  |  |
| TERM FIVE：61－75 CREDIT HOURS |  |  |  |  |  |
| Math or Science Elective | 3 | $\square$ |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MSE 315：Mathematical and Computer Methods in Materials（CS） | 3 | 区 |  |  |  |
| \＃MSE 330：Thermodynamics of Materials | 3 | 区 |  |  |  |
| \＃MSE 355：Materials Structure and Microstructure | 3 | 区 |  |  |  |
| \＃MSE 356：Materials Structure and Microstructure Laboratory | 1 | 区 |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US （C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SIX：76－90 CREDIT HOURS |  |  |  |  |  |
| \＃MSE 335：Materials Kinetics and Processing | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． |
| \＃MSE 358：Introduction to Electronic，Magnetic，\＆Optical Properties | 3 | 区 |  |  |  |
| \＃MSE 420：Physical Metallurgy | 3 | 区 |  |  |  |
| \＃MSE 421：Physical Metallurgy Laboratory | 1 | 区 |  |  |  |
| \＃MSE 450：Introduction to Materials Characterization | 3 | 区 |  |  |  |
| \＃MSE 451：Introduction to Materials Characterization Laboratory | 1 | 区 |  |  |  |
| TERM SEVEN：91－105 CREDIT HOURS |  |  |  |  |  |
| \＃MSE 440：Mechanical Properties of Solids | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． <br> －The advanced science elective includes most $200-$ level and above math／science courses．See Advisor for approved advanced science electives． |
| \＃MSE 470：Polymers and Composites | 3 | 区 |  |  |  |
| \＃MSE 471：Introduction to Ceramics | 3 | 区 |  |  |  |
| \＃MSE 482：Materials Engineering Design（L） | 3 | 区 |  |  |  |
| \＃Advanced Science Elective | 3 | 区 |  |  |  |
| TERM EIGHT：106－120 CREDIT HOURS |  |  |  |  |  |
| \＃MSE 490：Capstone Design Project（L） | 3 | 区 |  |  | \＃Designates Major Course：A minimum cumulative GPA of 2.0 required． <br> －The technical electives include most $300-\mathrm{level}$ and above engineering／math／science courses． See Advisor for approved technical electives． |
| \＃MSE Technical Elective | 3 | $\square$ |  |  |  |
| \＃MSE Technical Elective | 3 | $\square$ |  |  |  |
| UD Humanities，Fine Arts \＆Design（HU）OR Social \＆Behavioral Science （SB） | 3 | 囚 |  |  |  |

Major Map: Materials Science and Engineering Bachelor of Science in Engineering (B.S.E.)
Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011

## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Hrs at ASU <br> $(30 \mathrm{~min})$ | Cumulative <br> GPA $(2.00$ <br> minimum $)$ | Major GPA <br> $(2.00 \mathrm{minimum}$ <br> GPA $)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56 \mathrm{~min})$ | Total Comm. College Hrs. (64 <br> Max $)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)

Natural Science-General (SG)

- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

## Major Map: Mechanical Engineering Bachelor of Science in Engineering (B.S.E.) Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011



## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total Hrs at ASU (30 <br> $\mathrm{min})$ | Hrs Resident Credit for Academic <br> Recognition <br> $(56 \mathrm{~min})$ | Major GPA (2.000 <br> Min. CUM GPA $)$ | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Comm. College <br> Hrs. (64 Max) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

Major Map: Mechanical Engineering (Computational and Mathematical Mechanics) Bachelor of Science in Engineering (B.S.E.)
Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011


## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Hrs at ASU <br> $(30 \mathrm{~min})$ | Cumulative <br> GPA (2.00 <br> minimum $)$ | Major GPA <br> $(2.00$ minimum <br> GPA $)$ | Hrs Resident Credit for <br> Academic Recognition <br> $56 \mathrm{~min})$ | Total Comm. College Hrs. (64 <br> Max) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

Major Map: Mechanical Engineering (Energy and Environment) -<br>Bachelor of Science in Engineering (B.S.E.)<br>Ira A. Fulton Schools of Engineering | Catalog Year: 2010-2011



## Graduation Requirements Summary:

| Total Hours Regular <br> Curriculum (120) | Total UD Hrs (45 <br> $\mathrm{min})$ | Total Hrs at ASU <br> $(30 \mathrm{~min})$ | Cumulative <br> GPA (2.00 <br> minimum $)$ | Major GPA <br> $(2.00$ minimum <br> GPA $)$ | Hrs Resident Credit for <br> Academic Recognition <br> $(56 \mathrm{~min})$ | Total Comm. College Hrs. (64 <br> Max) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition

Additional Notes:

## Barrett Academic Course Requirements

Honors students must maintain high standards of academic performance and show progress toward completion of graduation requirements in their disciplinary majors and in Barrett. In order to graduate from Barrett, students must complete the following (which includes a total of 36 credit hours of honors course work):

1. HON 171 and HON 272/273/274 The Human Event must be completed in sequence during a student's first two semesters in the college.
2. Thirty additional credit hours of honors course work must be earned with a letter grade of "C" (2.00) or higher. This may include HON prefix classes, honors sections of classes, honors contracts or any automatic honors course such as ENG 105 (in-person sections), CHM 117, CHM 118, PHY 333, or any graduate-level course.
3. Included in the 36 credit hours of honors course work are 18 hours of upper-division or graduate-level honors credits for an earned letter grade of "C" (2.00) or higher, including six credit hours of honors course work outside the academic major. Students should investigate specialized honors upper-division tracks within their majors.
4. Students admitted as upper-division transfer students (defined as 48 post-high school university credits completed by the time of planned enrollment in Barrett) must complete a three-credit, 300-level upperdivision HON special topics course in addition to the 18 required hours of upper-division honors course work. Six of the 21 honors credits must be outside the academic major. A total of 21 hours of upper-division honors course work are required for these transfers because transfers do not have time to complete all 36 honors hours.
5. Students are required to complete an honors thesis/creative project for at least three credit hours though students are encouraged to complete six thesis credit hours. The thesis credit hours may be included in the 18 required hours of upper-division honors course work. The honors thesis is launched with a prospectus form due one academic year before the defense. The final honors thesis copy must be filed by the posted deadline during the student's graduation semester.
6. ASU graduation requirements in an academic major must be met.
7. The student must maintain a cumulative ASU GPA of 3.25 or higher.

Barrett course requirements may be met in a variety of ways. There are two specific required courses for first-year students. Only courses in which a student receives a grade of " $C$ " (2.00) or higher may be used to meet Barrett requirements.

Those entering the college as lower-division students must take 18 lower-division honors credits, which include HON 171 and 272/273/274 The Human Event. This cross-disciplinary seminar acquaints them with ideas that form the foundation of a university education and emphasizes critical thinking, discussion and writing.

Those who enter as upper-division students must take 21 upper-division honors credits, including a required 300level honors course. Junior-level seminar courses introduce them to critical thinking, discussion and writing in a
topical area chosen by the instructor. It is expected that all students complete this course no later than the first or second semester after transferring.

Departmental honors-only courses are limited to honors students and others who receive special permission from the instructor to enroll. Enrollment in these courses is limited. Compared to their non-honors equivalents, these courses are designed to offer a richer, more complex intellectual experience appropriate to the discipline and the level of the course for all students enrolled. Other disciplinary honors courses group honors students in small cohorts to work on research projects of common interest.

Honors contracts are available in many departmental courses allowing honors students to contract with the instructor of designated non-honors courses to earn honors credit by pursuing enrichment activities, which may include supplemental sessions with the instructor. Honors contracts must be filed during the first four weeks of class and completed during the semester in which the course is offered. Each contract form offers guidelines to aid students and faculty in developing appropriate contracts.

Course numbers listed in the online ASU schedule of classes as 298/492 Honors Directed Study, 493 Honors Thesis, 497 Honors Colloquium and all classes with the HON prefix are reserved for students in Barrett and always count for honors credit. Students may receive credit for more than one of each of these courses in a given department.

Departmental courses with the number 493 are reserved for honors students completing their honors theses and creative projects. A student may enroll for these courses only with the approval of the sponsoring academic department and of the faculty member who serves as the student's thesis director. Course numbers listed in the online ASU schedule of classes as 493 fulfill the student's upper-division literacy and critical inquiry (L) General Studies requirement.

There are certain courses that carry automatic honors credit. These include ENG 105 (any in-person section), CHM 117, CHM 118, and PHY 333. Graduate level courses automatically earn honors credit.

Major Map: Journalism and Mass Communication - Bachelor of Arts (B.A.)<br>Walter Cronkite School of Journalism and Mass Communication | Catalog Year: 2010-2011



# Major Map: Journalism and Mass Communication <br> - Bachelor of Arts (B.A.) 

Walter Cronkite School of Journalism and Mass Communication | Catalog Year: 2010-2011

Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum) | Total UD Hours <br> (minimum 45) | Cumulative GPA <br> (2.50 minimum required for major) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Total Community College <br> Hrs (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Sciences-Quantitative (SQ)
- Natural Sciences-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

Students other than first-time freshmen may take the English Grammar Exam one time to attempt to test out of JMC 101 Grammar for Journalists. Majors must maintain at least a 2.50 ASU cumulative GPA and a 2.50 JMC cumulative GPA to take JMC courses beyond JMC 201.
Students must complete at least 12 hours of upper-division coursework outside the major.
Students must complete a minimum of 56 hours of ASU coursework to qualify for ASU honors at graduation.

BAS- Applied Science (Technical Communication)

## Bachelor of Applied Science Degree

| Student Name | ID. Number |
| :---: | :---: |
| A.A.S. Degree | Date A.A.S. Degree Granted |
| A.A.S. Degree Granting Institution | ASU Catalog Year 2010-2011 |
| B.A.S. Academic Department Technical Communication | Advisor |
| Number of Upper Division Transfer Credits | Expected Graduation Date |
| Institution of Transfer Course Work (Upper Division Only) |  |

## General Studies Sequence (19 Hours)

| ASU |  |  |  | Transfer |
| :--- | :---: | :--- | :--- | :--- |
| Numeracy - ASC 315 | 3 |  |  |  |
| Science - ASC 325 | 4 |  |  |  |
| Literacy [L] | 3 |  |  |  |
| Humanities [HU] and [H] [C] | 3 |  |  |  |
| Social Science [SB] | 3 |  |  |  |
| General Studies [HU or SB] and [G] | 3 |  |  |  |
| Sub Total |  |  |  |  |
|  | Hrs. |  |  |  |

## B.A.S. Area Core (15 Hours)

| BAS Degree <br> Summary |
| :--- |
| Credit <br> Hours |
| Degree Block Transfer |
| General Studies |
| B.A.S. Area Core |
| Technical Writing |
| Assignable Credits |


|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| TWC 301 General Principles of Multimedia Writing | 3 |  |  |  |
| TWC 401 Principles of Technical Communication | 3 |  |  |  |
| TWC 347 Written Communication for Managers | 3 |  |  |  |
| STP 420 Introductory Applied Statistics | 3 |  |  |  |
| TWC 421 Principles of Writing with Technology | 3 |  |  |  |
| Sub Tota | 15 | Hrs. |  |  |

Technical Writing and Communication (20 Hours)

|  | ASU | Transfer | Transfer From | Grade |
| :---: | :---: | :---: | :---: | :---: |
| TWC 411 Principles of Visual Communication | 3 |  |  |  |
| TWC 431 Principles of Technical Editing | 3 |  |  |  |
| TWC 44X Genre Course | 3 |  |  |  |
| TWC 45X Information Series Course | 3 |  |  |  |
| TWC 499 Individual Instruction | 2 |  |  |  |
| TWC 3/4XX Elective | 3 |  |  |  |
| TWC 3/4XX Elective | 3 |  |  |  |
| Sub Total | 20 | Hrs. |  |  |
| Assignable Credits (6 Hours) | ASU | Transfer | Transfer From | Grade |
|  | 3 |  |  |  |
|  | 3 |  |  |  |

Advisor Comments
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Total Upper Division Hours $\qquad$

Total ASU Resident Hours

| Student Signature | Date- | Dean Signature | Date |
| :---: | :---: | :---: | :---: |
| A Advivorō/Chair Signature | Date- | University Signature | Date |
| Academic Catalog Archive 2010-2011 1041 |  |  |  |

Major Map: General Studies -
Bachelor of General Studies (B.G.S.)
School of Letters and Sciences | Catalog Year: 2010-2011


| Awareness Areas (2 courses minimum and must fulfill all 3 areas) |
| :--- |
| Double counting is permissible between Awareness Areas, other courses that fulfill |
| graduation requirements, and within the Awareness Areas. |
| Global Awareness (G): |
| Historical Awareness (H): |
| Cultural Diversity (C): |

## II. Major requirements

| ASU 101: The ASU Experience (freshmen only) | 1 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| OR UNI 150 Major and Career Exploration |  |  |  |  |

## Graduation Requirements

| Total Hours <br> Required (120 <br> hrs min) | Upper-Division <br> Hours Required <br> (45 hrs min) | ASU Resident <br> Hours Required <br> (30 hrs min) | Max. 2-yr Transfer <br> Hours allowed (64 <br> hrs max) | Minimum GPA <br> required (2.00 <br> min) | ASU Resident Hours for <br> Academic Recognition (56 <br> hrs min) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |


| IV. Electives |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## Please Note:

- A grade of $C$ or better is required in all major courses - Majors must maintain at least a 2.00 ASU cumulative GPA and 2.00 major GPA
- Twenty-one hours in the major must be upper division
- Cluster classes in the major cannot be used for minor classes or other clusters
- Consult the ASU catalog for more information about General Studies requirements
- Elective hours needed may change and are dependent on how other requirements are satisfied
- Evaluation of transfer courses for cluster requirements should be directed to the appropriate departmental advisor.
- Questions regarding cluster requirements, course prerequisites and class registration should be directed to an advisor in the department or college offering the cluster.
- See ASU catalog for information about repeating courses
- This assessment is supplemental to your DARS report.

To obtain a copy of your DARS report, go to:
http://www.asu.edu/interactive
Cluster Choices: Department will be adding clusters for 2010. Students will choose four [4] clusters and at least
three [3] classes within each one. Language and Culture; Values and Society; Healthcare; Society and Mass Media; Special Events Management; Nonprofit Management; Meeting Planning; The Urban Experience; Leadership; U.S. Social Welfare System and Social Services; Criminology and Criminal Justice; Law and Criminal Justice; Science and Society. See http://sls.asu.edu/gs/clusters.html.

Major Map: History and Culture - Bachelor of Arts (B.A.) School of Letters and Sciences | Catalog Year: 2010-2011


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total UD Hours <br> $($ minimum 45 $)$ | Cumulative GPA <br> $(2.00$ minimum $)$ | Total Hrs at ASU <br> $($ minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Total Comm. College Hrs. <br> (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)

○ Natural Science-General (SG)

- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

The B.A. in History and Culture has three tracks: The following are the focus area \& specific elective courses for each track:

| Track 1: Environmental History and Culture | Track 1: Environmental History and Culture <br> Focus Area Courses |
| :--- | :--- |
| HST 319 U.S. Urban History Track Specific Elective Courses <br> HTY 320History of American Agriculture  <br> HTY 326 History of Landscaping  <br> HTY 350/394 Environmental History  <br> HTY 374Western Rivers  <br> HTY 440The Pre-Modern City  <br> HTY 450History of Ecology and Conservation  <br> PHI 327 Environmental Philosophy  l |  |


| Track 2: History and Culture of The American Southwest | Track 2: History and Culture of the American Southwest |
| :---: | :---: |
| Focus Area Courses | Track Specific Elective Courses |
| HST 293 Historical Themes in Latin America | Any courses with an AIS, CCS, HST, or HTY prefix. Students may also |
| HST 305 Studies in Latin American History | take courses with an SPA or SPN prefix. Students are strongly |
| HST 329 Women in $20^{\text {th }}$ Century U.S. West | encouraged to complete SPA 101 and SPA 102. |
| HST 330 Mexican Women in the U.S. Conquests and Migration |  |
| HST 331 Mexican-American History to 1900 |  |
| HST 332 Mexican-American History since 1900 |  |
| HST 337 American Indian History to 1900 |  |
| HST 338 American Indian History since 1900 |  |
| HST 341 U.S. West, $19{ }^{\text {th }}$ Century |  |
| HST 342 U.S. West, $20^{\text {th }}$ Century |  |
| HST 417 Topics in Mexican American History |  |


| Track 3: History for Secondary Teachers | Track 36: History for Secondary Teachers <br> Focus Area Courses |
| :--- | :--- |
| HST 101 Global History | Track Specific Elective Courses |
| HST 102 Western Civilization | In consultation with an advisor, students may use courses with the |
| following prefixes: ASB, ECN, GCU, GPH, HST, HTY, PGV, POL, |  |
| HST 104 Western Civilization Civilization |  |
| REL, SOC, WSH, or WST. |  |
| HST 109 United States to 1865 |  |
| HST 210 United States since 1865 American Social History |  |
| HST 313 American Cultural History to 1865 |  |
| HST 314 American Cultural History since 1865 |  |
| HST 325 Immigration and Ethnicity |  |
| HST 337 American Indian History to 1900 |  |
| HST 338 American Indian History since 1900 |  |
| HST 341 U.S. West, 19 Ch Century |  |
| HST 342 U.S. West, 20 |  |
| REL 100 Religions of the World |  |

## Bachelor of Interdisciplinary Studies

Catalog: 2010-2011

| III. BIS Core (12 hours) | Total <br> Hours | UD <br> Hours | Res <br> Hours | Grade |
| :--- | :---: | :---: | :---: | :--- |
| BIS 301: Foundations of Interdisciplinary Studies (L) | 3 | 3 | 3 |  |
| BIS 302: Interdisciplinary Inquiry | 3 | 3 | 3 |  |
| BIS 401: Applied Interdisciplinary Studies | 3 | 3 | 3 |  |
| BIS 402: Senior Seminar (L) | 3 | 3 | 3 |  |

IV. Concentration I (18-30 hours) ${ }^{1}$

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## V. Concentration II (18-30 hours) ${ }^{1}$

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

VI. Electives (4-40 or more hours) ${ }^{2}$

| Total Hours <br> Required | Upper Division <br> Hours Required | ASU Resident <br> Hours Required | Max. 2-yr Transfer <br> Hours allowed | Minimum GPA <br> required | ASU Resident Hours for <br> Academic Recognition |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 120 | 45 | 30 | 64 | 2.00 | 56 |

- For more information about the BIS please go to: http://sls.asu.edu/
- This check sheet is for reference only; please consult your ASU DARS report for official information about your requirements.
${ }^{1}$ Grades of " $C$ " or better are required for all courses within these categories.
${ }^{2}$ There is no specific elective or minor requirement for the BIS degree. Students needing more than 15 hours of electives to meet the 120 hour requirement are encouraged to pursue a minor in addition to their BIS concentration. Students are encouraged to use these electives to fulfill prerequisite course requirements or gain knowledge and skills in preparation for required upper-division required courses.

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

 Letters \& Sciences
ARIZONA STATE UNIVERSITY

|  |  | ASU | Trans <br> I. First Year Composition (3-6 hours) | Hours <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| Grade | Upp <br> Div |  |  |  |
| ENG 101:First Year Comp 1 (3) and |  |  |  |  |
| ENG 102:First Year Comp 2 (3) or, if eligible |  |  |  |  |
| ENG 105: Advance First Year Comp (3) |  |  |  |  |

Sub Total (I): 3-6

## II. University General Studies (35-37 hours)

Humanities/Fine Arts \& Social/Behavioral Sciences (15 hours) Required: 15 hours combined; 6 hours in one area, 9 hrs in the other AND one course must be upper division.

| HU: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $\mathrm{HU}:$ |  |  |  |  |
| $\mathrm{SB}:$ |  |  |  |  |
| SB: |  |  |  |  |
| HU or SB: |  |  |  |  |
| Natural Sciences (8 hours) |  |  |  |  |
| SQ: |  |  |  |  |
| SG: |  |  |  |  |

Literacy and Critical Inquiry (6 hours)

| L: | BIS 301: Foundations of Interdis. Studies | Satisfied by major |
| :--- | :--- | :--- |
| L: | BIS 402: Senior Seminar | Satisfied by major |

Mathematics \& Statistics/Computer Applications (6 hours)

| MA: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CS: |  |  |  |  |

Awareness Areas (2 courses minimum and must fulfill all 3 areas)
Double counting is permissible between Awareness Areas, other courses that fulfill graduation requirements, and within the Awareness Areas

| Global Awareness (G): |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Historical Awareness (H): |  |  |  |  |
| Cultural Diversity (C): |  |  |  |  |
|  |  |  |  |  |


| Total Hours Required | Upper Division <br> Hours Required | Resident Hours <br> Required | Minimum GPA <br> required | Hours Required for ASU <br> Academic Recognition |
| :---: | :---: | :---: | :---: | :---: |
| 120 | 45 | 30 | 2.0 | 56 |
| Max Transfer Hours <br> Allowed | Max. 2-yr Transer <br> Hours allowed with <br> AGEC completion | AGEC Completed? | AA Completed? |  |
| 90 | 75 | $\mathrm{Y} \square$ or N $\square$ | $\mathrm{Y} \square$ or N $\square$ |  |

- For more information about the BIS degree in Organizational Studies, please go to: http://sls.asu.edu/bis/org_studies.htm|
- Course pre-requisites are available online at: http://www.asu.edu/catalogs
- This check sheet is for reference only; please consult your DARS report for official information about your requirements.


## Bachelor of Interdisciplinary Studies (BIS)

 Organizational Studies ConcentrationCatalog: 2010-2011

| III. BIS Core (15 hours) |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| BIS 300: Theories \& Applications of Org Studies | 3 |  |  | XSU |
| Hours | Trans | Hours | Grade | Upp <br> Div |
| BIS 301: Foundations of Interdis. Studies (L) | 3 |  |  | X |
| BIS 302: Interdisciplinary Inquiry | 3 |  |  | X |
| BIS 401: Applied Interdisciplinary Studies | 3 |  |  | X |
| BIS 402: Senior Seminar (L) | 3 |  |  | X | Sub Total (III): 15

IV. Organizational Studies Concentration (30 hours) ${ }^{1}$

| Organizational \& Management Theory (3 hours) <br> TMC 346: Management Dynamics | 3 |  |  | X |
| :--- | :---: | :---: | :---: | :---: |
| Social Processes \& Human Interaction (3 hours) <br> SOC 352: Social Change (SB, G, H) | 3 |  |  | X |
| Information Management \& Organizational <br> Technology (3 hours) <br> COM 394: Communication in the Electronic Age | 3 |  |  |  |
| Diversity (3 hours) <br> BIS 350: Diversity and Organizations (L, C) | 3 |  |  | X |
| Organizational Contexts (9 hours) <br> POS 360: World Politics <br> SOC 321: Sociology of Work <br> REL 320: American Religious Traditions (or) <br> REL 321: Religion in America | 3 |  |  |  |
| Ethics (3 hours) <br> PHI 306: Applied Ethics | 3 |  | X |  |
| Quantitative Methods (3 hours) <br> PAF 401: Statistics | 3 |  |  | X |
| Organizational Tools/Skills (3 hours) <br> ENG 301: Writing for the Professions (or) <br> TWC 301: General Principles of Multimedia | 3 |  | X |  | Sub Total IV: 30

## V. Electives (38-40 hours) ${ }^{2}$

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Sub Total (V): $38-40$ |  |  |  |  |

[^0]${ }^{2}$ There is no specific elective or minor requirement for the BIS degree. Students needing more than 15 hours of electives to meet the 120 hour requirement are encouraged to pursue a minor in addition to their BIS concentration; however, minors are not required.

## Bachelor of Liberal Studies

Catalog: 2010-2011

| I. First Year Composition (3-6 hours) ${ }^{1}$ | Total Hours | UD Hours | Res Hours | Grade |
| :---: | :---: | :---: | :---: | :---: |
| ENG 101:First Year Comp 1 (3) and |  |  |  |  |
| ENG 102:First Year Comp 2 (3) or, if eligible |  |  |  |  |
| ENG 105: Advance First Year Comp (3) |  |  |  |  |

II. ASU Experience: (3 hours) ${ }^{2}$
ASU 101: The ASU Experience $\quad$ In

## III. University General Studies (29-38 hours)

Humanities/Fine Arts \& Social/Behavioral Sciences (15 hours) Required: 15 hours combined; 6 hours in one area, 9 hrs in the other AND one course must be upper division.

| HU |  |  |  |
| :---: | :---: | :---: | :---: |
| HU |  |  |  |
| SB: |  |  |  |
| SB: |  |  |  |
| HU or SB: | X |  |  |
| Natural Sciences ${ }^{\text {8 }}$ |  |  |  |
| SQ: |  |  |  |
| SG: |  |  |  |
| Literacy and Critical |  |  |  |
| L: Met by BIS 370 |  |  |  |
| L: Met by BIS 470 |  |  |  |
| Mathematics \& Statis |  |  |  |
| MA: |  |  |  |
| CS: |  |  |  |

Awareness Areas (2 courses minimum and must fulfill all 3 areas)
Double counting is permissible between Awareness Areas, other courses that fulfill graduation requirements, and within the Awareness Areas.

| Global Awareness (G): |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Historical Awareness (H): |  |  |  |  |
| Cultural Diversity (C): |  |  |  |  |


| Total Hours <br> Required | Upper Division <br> Hours Required | ASU Resident <br> Hours Required | Max. 2-yIT Transfer <br> Hours alowed | Minimum GPA <br> required | ASU Resident Hours for <br> Academicic Recognition |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 120 | 45 | 30 | 64 | 2.00 | 56 |

- For more information about the BLS please go to: http://sls.asu.edu/ls/
- This check sheet is for reference only; please consult your ASU DARS report for official information about your requirements.
${ }^{1}$ Grades of "C" or better are required for courses within this category.
${ }^{2}$ ASU 101 is required only of all freshmen.
${ }^{3}$ Please visit http://sls.asu.edul/s/ for a list of courses offered each semester that fulfill this requirement. Grades of " $C$ " or better are required.
${ }^{4}$ Please visit http://sls.asu.edu/ls/ for a list of courses offered each semester that fulfill this requirement. . Grades of "C" or better are required.

| IV. BLS Core (6 hours) | Total <br> Hours | UD <br> Hours | Res <br> Hours | Grade |
| :--- | :---: | :---: | :---: | :---: |
| BIS 370: Dimensions of Liberal Studies | 3 | 3 | 3 |  |
| BIS 470: Liberal Studies Seminar | 3 | 3 | 3 |  |

V. Liberal Studies Humanities: (12 hours) ${ }^{3}$

|  |  | 3 |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | 3 |  |  |
|  |  | 3 |  |  |
|  |  | 3 |  |  |

## VI. Liberal Studies Social Sciences (12 hours) ${ }^{4}$

|  |  | 3 |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | 3 |  |  |
|  |  | 3 |  |  |
|  |  | 3 |  |  |

## VII. Electives (as needed for 120 total hours) ${ }^{5}$

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

${ }^{5}$ There is no specific elective or minor requirement for the BLS degree. Students are encouraged to pursue a minor in addition to the BLS requirements. Students are encouraged to use these electives to fulfill prerequisite course requirements or gain knowledge and skills in preparation for required upper-division required courses.

Upper division courses with the following prefixes will satisfy the Liberal Studies Humanities and Liberal Studies Social Sciences requirements, but this is not an exhaustive list. It represents qualifying prefixes for which ASU frequently offers online classes. Please consult with your Academic Success Specialist to determine whether other humanities and social science courses may also satisfy these major requirements.

Liberal Studies Humanities<br>- Art History/Auxiliary (ARS, ARA)<br>- Asian Pacific American Studies (APA)<br>- English (ENG, ENH)<br>- Film and Media Studies (FMS)<br>- History (HST, HTY, HIS)<br>- Mass Communication (MCO, MCN)<br>- Philosophy (PHI, PHL)<br>-Religious Studies (REL)<br>- Theatre (THE, THR)<br>- Women's Studies (WSH)

## Liberal Studies Social Sciences

- Aging and Lifespan Development (ALD)
- Anthropology (ASB, ANT, ASM)
- Communication (COM, CMA, CMN)
- Criminal Justice (CRJ)
-Cultural Geography (GCU)
- Educational Psychology (EDP)
-Family Studies (FAS/CDE)
- Justice Studies (JUS)
- Parks and Recreation Management (PRM)
-Political Science (POL, POS, PLS)
- Psychology (PGS)
-Public Affairs (PAF)
- Public Policy and Government (PGV)
- Science, Technology, and Society (STS)
- Social and Behavioral Sciences (SBS)
- Social Justice and Human Rights (JHR)
- Social Work (SWU)
- Sociology (SOC, SCL)
- Transborder Chicana/o Latina/o Studies (TCL)
-Women's Studies (WST, WNS)

Major Map: Literature, Writing and Film -<br>Bachelor of Arts (B.A.)<br>School of Letters and Sciences | Catalog Year: 2010-2011



Major Map: Literature, Writing and Film -<br>Bachelor of Arts (B.A.)<br>School of Letters and Sciences | Catalog Year: 2010-2011

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total UD Hours <br> $($ minimum 45) | Cumulative GPA <br> $(2.00$ minimum $)$ | Total Hrs at ASU <br> $($ minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Total Comm. College Hrs. <br> (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:

The B.A. in Literature, Writing, and Film has six tracks. The following are the focus area \& specific elective courses for each track:

| Tracks | Track Specific Focus Area Courses | Track Specific Elective Courses |
| :---: | :---: | :---: |
| Literature and Film | Students choose from among the following: <br> ENG 230: Introduction to Film Studies (L or HU) <br> ENG 366: Literature on Film <br> ENG 378: Environmental Creative Nonfiction (L \& HU) <br> ENG 367: Environmental Issues in Literature (L \& HU) <br> ENG 334: The American Southwest in Literature and Film (L \& HU) <br> ENG 320: Medievalism in Modern Culture <br> ENG 466: Studies in International Film (L or HU, G) <br> ENG 467: American Film Musicals (L or HU) <br> ENG 464: Great Directors (L or HU) <br> ENG 468: Environmental Literary Criticism <br> ENG 221: Survey of English Literature (HU) <br> ENG 222: Survey of English Literature (HU, H) <br> ENG 241: Literatures of the United States to 1860 (HU) <br> ENG 242: Literatures of the United States, 1860-Present (HU) <br> ENG 321: Introduction to Shakespeare (L or HU) <br> ENG 365: History of Film (HU) <br> ENG 385: Career Development for English Majors (L) | Any ENG or FMS prefix courses |
| Writing | Students choose from among the following: <br> ENG 243: Introduction to Writing Family History (L) <br> ENG 244: Introduction to Researching Family History <br> ENG 373: Publishing in Literary Magazines <br> ENG 376: Writing a Personal History (L) <br> ENG 377: Editing Family History for Public Audiences (L) <br> ENG 389: Writing Creative Nonfiction for Publication <br> ENG 344: Intermediate Family History Research <br> ENG 379: Travel Writing <br> ENG 382: Digital Project Management for Humanities and Arts <br> ENG 383: Digital Media in the Humanities and Arts <br> ENG 368: Travel Writing (L) <br> ENG 204: Introduction to Contemporary Literature (HU) <br> ENG 210: Introduction to Creative Writing <br> ENG 310: Intermediate Creative Writing <br> ENG 411: Advanced Creative Writing <br> ENG 412: Creative Nonfiction <br> ENG 212 English Prose Style <br> ENG 215 Strategies for Academic Writing <br> ENG 216 Persuasive Writing on Public Issues <br> ENG 385 Career Development for English Majors <br> ENG 472 Rhetorical Studies <br> TWC 301 General Principles of Multimedia Writing | Any ENG Writing courses <br> Any Upper Division ENG literature courses. Any of the following GIT courses: <br> GIT 194: Introduction to Computer Documents <br> GIT 294: Introduction to Digital Photography <br> GIT 210: Creative Thinking and Design Visualization <br> GIT 237: Web Content Design <br> GIT 233 Digital Publishing <br> GIT 333 Printing Technology <br> GIT 414 Web Site Design and Internet/Web Technologies <br> Any of the following TWC courses: <br> TWC 401 Principles of Technical Communication <br> TWC 403 Writing for Professional Publication <br> TWC 411 Principles of Visual Communication <br> TWC 421 Principles of Writing with Technology |
| English for Secondary Teachers | Students choose from among the following: <br> ENG 366: Literature on Film <br> ENG 334: The American Southwest in Literature (L \& HU) <br> ENG 320: Medievalism in Modern Culture (L \& HU) <br> ENG 481: Methods of Teaching Secondary Writing <br> ENG 483: Methods of Teaching Secondary Literature and Language <br> ENG 221: Survey of English Literature (HU) <br> ENG 222: Survey of English Literature (HU, H) <br> ENG 241: Literatures of the United States to 1860 (HU) <br> ENG 242: Literatures of the United States, 1860-Present (HU) <br> ENG 314 Modern Grammar <br> ENG 321: Introduction to Shakespeare (L or HU) <br> ENG 333 American Ethnic Literature | Any courses with an ENG prefix |

Major Map：Science，Technology and Society－<br>Bachelor of Science（B．S．）<br>School of Letters and Sciences｜Catalog Year：2010－2011

|  |  |  | Competed Transfer Pathway： |  | Completed General Education：$\square$ AGEC $\quad \square \mathrm{IGETC/CSUGE}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\square$ MAPP | TAG $\square$ ATP $\square$ None |  |
| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \begin{array}{l} \text { Upper } \\ \text { Div. } \\ \hline \end{array} \\ & \hline \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| TERM ONE：0－15 CREDIT HOURS |  |  |  |  |  |
| STS 101：Introduction to Science，Technology and Society（SB） | 3 | $\square$ |  | Grade of C | －ASU 101 is for ASU freshman students only Not required of transfer students <br> －Transfer students with 64 credit hours or more transferred must take STS 304 instead of STS 101. <br> －An SAT，ACT，Accuplacer，or TOEFL score determines placement into first－year composition courses <br> －ASU Math Placement Exam score determines placement in Mathematics course |
| ASU 101：The ASU Experience | 1 | $\square$ |  |  |  |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Mathematics（MA） | 3 | $\square$ |  |  |  |
| TERM TWO：16－30 CREDIT HOURS |  |  |  |  |  |
| STS 110：Global Technology and Development（SB，G） | 3 | $\square$ |  | Grade of C | ＊It is highly recommended that STS students take a statistics course for their（CS）general studies requirement． <br> －Transfer students with 64 credit hours or more transferred must take STS 317 instead of STS 110. |
| ENG 101 and 102：First－Year Composition OR ENG 107 and 108：English for Foreign Students OR ENG 105：Advanced First－Year Composition | 3 | $\square$ |  | Grade of C |  |
| Computer／Statistics／Quantitative applications（CS）＊ | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Global Awareness（G） | 3 | $\square$ |  |  |  |
| TERM THREE：31－45 CREDIT HOURS |  |  |  |  |  |
| Historical Awareness（H） | 3 | $\square$ |  |  | －First－year composition requirement completed |
| Literacy \＆Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Natural Science－General（SG）OR Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Cultural Diversity in the US（C） | 3 | $\square$ |  |  |  |
| Elective | 3 | $\square$ |  |  |  |
| TERM FOUR：46－60 CREDIT HOURS |  |  |  |  |  |
| Elective | 3 | $\square$ |  |  | －See your advisor for a list of courses that fulfill your chosen STS Track and to discuss the required Minor for the degree． |
| Humanities，Fine Arts \＆Design（HU） | 3 | $\square$ |  |  |  |
| Natural Science－Quantitative（SQ） | 4 | $\square$ |  |  |  |
| Approved upper division STS Track course | 3 | 区 |  | Grade of C |  |
| Approved Minor course | 3 | $\square$ |  |  |  |
| TERM FIVE：61－75 CREDIT HOURS |  |  |  |  |  |
| STS 301：Research in Science and Technology Studies（SB） | 3 | 区 |  | Grade of C |  |
| STS 302：Philosophy of Science and Technology | 3 | 区 |  | Grade of C |  |
| Approved upper division STS Track course | 3 | 区 |  | Grade of C |  |
| Approved upper division STS Track course | 3 | 区 |  | Grade of C |  |
| Approved Minor course | 3 | $\square$ |  |  |  |
| TERM SIX：76－90 CREDIT HOURS |  |  |  |  |  |
| STS 303：History of Science and Technology（H） | 3 | 区 |  | Grade of C |  |
| STS 305：Science and Social Theory（SB） | 3 | 区 |  | Grade of C |  |
| Approved upper division STS Track course | 3 | 区 |  | Grade of C |  |
| Approved Minor course | 3 | $\square$ |  |  |  |
| Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SEVEN：91－105 CREDIT HOURS |  |  |  |  |  |
| STS 306：Social Effects of Science and Technology（SB） | 3 | 区 |  | Grade of C |  |
| Approved upper division STS Track course | 3 | 区 |  | Grade of C |  |
| Approved Minor course | 3 | $\square$ |  |  |  |
| Social \＆Behavioral Sciences（SB） | 3 | $\square$ |  |  |  |
| Upper Division Literacy \＆Critical Inquiry（L） | 3 | 区 |  |  |  |
| TERM EIGHT：106－120 CREDIT HOURS |  |  |  |  |  |
| STS 484：Internship | 3 | 区 |  | Grade of C |  |
| Approved STS Track course | 3 | 区 |  | Grade of C |  |
| Approved Minor course | 3 | $\square$ |  |  |  |
| Approved Minor course | 3 | $\square$ |  |  |  |
| Upper division Humanities，Fine Arts \＆Design（HU）OR Upper division Social \＆Behavioral Sciences（SB） | 3 | 区 |  |  |  |

Major Map: Science, Technology and Society Bachelor of Science (B.S.)

## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total UD Hours <br> (minimum 45) | Cumulative GPA <br> $(2.00$ minimum) | Total Hrs at ASU <br> (minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Total Comm. College Hrs. <br> (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the US (C)
- Global Awareness (G)
$\circ$ Historical Awareness (H)
- First-Year Composition


## Additional Notes:

Students who begin the STS program at ASUPOLY as freshmen will take STS 101 and 110. STS 304 and 317 are for transfer students with 64 units who need upper division credit.

It is highly recommended that STS students take a statistics course for their (CS) general studies requirement.
Students in the Science, Technology, and Governance Track will complete the following coursework or their equivalents:

- POS 310 American National Government
- STS 318 Science, Technology and Government
- STS 325 Science, Technology and Public Policy
- STS 331 Ethical Issues in Science and Technology
- STS 364 Science, Technology and National Security
- STS 425 Law, Values, and Science and Technology

Students in the Global Technology and Development Track will complete the following coursework or their equivalents:

- STS 328 Science, Technology and Culture
- STS 329 Cultivating Technology in Newly Industrializing Countries
- STS 330 Information Technology and Globalization
- STS 331 Ethical Issues in Science and Technology
- STS 332 Seminar: Global Issues in Science and Technology
- STS 364 Science, Technology and National Security

Students in the General STS Track must meet with an advisor to determine the coursework needed to fulfill this area of the degree.

- The General STS Track has been designed as the integrative component of the STS degree program. It can be used to design dual degrees and double majors with other programs. Students can utilize it in integrating other degree programs and courses available at ASU.
- For instance, the Track can be employed in establishing a pre-law degree program with more emphasis on a science and technology curriculum.
- Students seeking secondary teaching certification can incorporate social science pedagogy courses.
- In each instance when this Track is chosen by a student, the student will work in conjunction with faculty advisors within Social and Behavioral Sciences and other units to work out an appropriate program of study.
- Students can utilize courses available at any unit within ASU for this purpose.

All STS students must take an approved Minor for STS Majors (18 Semester Hours)

- Each approved program of study in the STS program must include at least one minor in a substantive field.
- STS students are encouraged to take minors in career fields, e.g., business, technology, technical communication, education, etc.
- The minor is to help prepare the student for a career upon graduation.
- Before taking minor courses, students must meet with their advisor to determine which minor is best suited for their chosen career field.

Major Map: Technical Communication Bachelor of Science (B.S.)

School of Letters and Sciences | Catalog Year: 2010-2011


## Graduation Requirements Summary:

| Total Hours <br> $(120$ minimum $)$ | Total UD Hours <br> (minimum 45) | Cumulative GPA <br> $(2.00$ minimum) | Total Hrs at ASU <br> $($ minimum 30) | Resident Credit for Academic <br> Recognition (minimum 56) | Total Community College Hrs <br> (maximum 64) |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements: Legend

- General Studies Core Requirements:
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative applications (CS)
- Humanities, Fine Arts, and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science-Quantitative (SQ)
- Natural Science-General (SG)
- General Studies Awareness Requirements
- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)
- First-Year Composition


## Additional Notes:


[^0]:    ${ }^{1}$ Grades of "C" or better are required for all courses within these categories.

