

ENGINEERING TRANSFER (ENGR.AS)
Tentative Generic Curriculum Fall 2014

Semester 1

| Course No. | Course Title | Credits |
|---------------------|---|-----------------|
| ENG-101 | English Composition 1 | 3 |
| CHEM-103 | General Chemistry 1 | 4 |
| ENGR-203 | Computer Applications in Engineering | 4 |
| or CSCI-111* | or Introduction To Java Programming Language | |
| or CSCI-100 | or Introduction to Computer Science | |
| MATH-155 | Calculus 1 | 4 |
| --- | Elective: Social Science | <u>3</u> |
| | | 18 |

Semester 2

| Course No. | Course Title | Credits |
|-----------------------|---|-----------------|
| ENG-102 | English Composition 2 | 3 |
| CHEM-203 | General Chemistry 2 | |
| or BIOL-106 ** | or General Biology 1 | 4 |
| ENGR-203 | Computer Applications in Engineering | 4 |
| or CSCI-111 | or Intro. To Java Programming Language | |
| or CSCI-110 | or Computer Science 1 (C++) | |
| MATH-255 | Calculus 2 | 4 |
| PHYS-132 | University Physics 1 | <u>4</u> |
| | | 19 |

Semester 3

| Course No. | Course Title | Credits |
|-------------------|--|----------------------|
| MATH-355 | Calculus 3 | 4 |
| PHYS-232 | University Physics 2 | 4 |
| --- | Elective: Engineering | 3(4) |
| --- | Elective: Engineering/Math/Science | 3(4) |
| | Elective: Social Science/Humanities | 3 |
| | | <u>17(19)</u> |

Semester 4

| Course No. | Course Title | Credits |
|--------------------------------|--|----------------------|
| MATH-439 & MATH-440 | Linear Algebra & Linear Algebra Lab | 4 |
| or MATH-455 | or Differential Equations | |
| or ENGR-411 | or Probability & Statistics for Engineers | |
| --- | Elective: Engineering | 3(4) |
| --- | Elective: Engineering | 3(4) |
| --- | Elective: Engineering/Math/Science | 3(4) |
| --- | Elective: Social Science/Humanities | 3 |
| | | <u>16(19)</u> |

*BIOL-106, General Biology 1, should be selected by Computer, Electrical, Industrial, and Mechanical Engineering Majors going to UMASS. **Computer and Electrical Engineers going to UMASS should take CSCI-111 (Java) while Civil and Mechanical majors should take CSCI-110 (C++).

| CHEMICAL ENGINEERING (ENGR.AS) | | |
|---------------------------------------|--|------------------|
| Semester 1 | | |
| Course No. | Course Title | Credits |
| CHEM-103 | General Chemistry 1 | 4 |
| ENGR-203 | Computer Applications in Engineering | 4 |
| MATH-155 | Calculus 1 | 4 |
| ENG-101 | English Composition 1 | 3 |
| --- | Elective: Social Science | 3 |
| | | <u>18</u> |
| Semester 2 | | |
| Course No. | Course Title | Credits |
| CHEM-203 | General Chemistry 2 | 4 |
| CSCI-100 | Introduction to Computer Science | 4 |
| MATH-255 | Calculus 2 | 4 |
| PHYS-132 | University Physics 1 | 4 |
| ENG-102 | English Composition 2 | 3 |
| | | <u>19</u> |
| Semester 3 | | |
| Course No. | Course Title | Credits |
| CHEM-320 | Organic Chemistry 1 | 4 |
| ENGR-330 | Introduction to Materials Science & Engineering | 3 |
| ENGR-340 | Introduction to Chemical Engineering | 3 |
| MATH-355 | Calculus 3 | 4 |
| --- | Elective: Social Science/Humanities | 3 |
| | | <u>17</u> |
| Semester 4 | | |
| Course No. | Course Title | Credits |
| CHEM-420 | Organic Chemistry 2 | 4 |
| ENGR-440 | Chemical Engineering Thermodynamics | 3 |
| MATH-455 | Differential Equations | 4 |
| PHYS-232 | University Physics 2 | 4 |
| --- | Elective: Social Science/Humanities | 3 |
| | | <u>18</u> |

**Civil & Environmental Engineering (ENGR.AS)
Tentative Curriculum Fall 2014**

Semester 1

| Course No. | Course Title | Credits |
|-------------------|---|----------------|
| ENG-101 | English Composition 1 | 3 |
| CHEM-103 | General Chemistry 1 | 4 |
| ENGR-203 | Computer Applications in Engineering | 4 |
| MATH-155 | Calculus 1 | 4 |
| --- | Elective: Social Science | 3 |
| | | 18 |

Semester 2

| Course No. | Course Title | Credits |
|-------------------|---|----------------|
| ENG-102 | English Composition 2 | 3 |
| CHEM-203 | General Chemistry 2 | 4 |
| CSCI-100 | Introduction to Computer Science | 4 |
| MATH-255 | Calculus 2 | 4 |
| PHYS-132 | University Physics 1 | 4 |
| | | 19 |

Semester 3

| Course No. | Course Title | Credits |
|-------------------|--|----------------|
| ENGR-310 | Mechanics 1 (Statics) | 3 |
| CIVL-310 * | Surveying 1 | 4 |
| MATH-355 | Calculus 3 | 4 |
| PHYS-232 | University Physics 2 | 4 |
| --- | Elective: Social Science/Humanities | 3 |
| | | 18 |

Semester 4

| Course No. | Course Title | Credits |
|-------------------|--|----------------|
| ENGR-335 | Mechanics of Materials | 3 |
| ENGR-350 | Engineering Thermodynamics | 3 |
| ENGR-351 | Engineering Thermodynamics Computational Laboratory | 1 |
| ENGR-411 | Probability & Statistics for Engineers | 3 |
| MATH-455 | Differential Equations | 4 |
| --- | Elective: Social Science/Humanities | 3 |
| | | 17 |

*CIVL-310, Surveying 1, may be taken as the regular course or with the honors lab component. UMass will accept the Surveying course for transfer credit without the honors component. A student transferring without the honors component will have to take 4 surveying labs at UMass to replace the honors lab at STCC.

| Computer Engineering (ENGR.AS) | | |
|---------------------------------------|--|----------------|
| Semester 1 | | |
| Course No. | Course Title | Credits |
| ENG-101 | English Composition 1 | 3 |
| CHEM-103 | General Chemistry 1 | 4 |
| ENGR-203 | Computer Applications in Engineering | 4 |
| MATH-155 | Calculus 1 | 4 |
| --- | Elective: Social Science | 3 |
| | | 18 |
| Semester 2 | | |
| Course No. | Course Title | Credits |
| ENG-102 | English Composition 2 | 3 |
| BIOL-106 * | General Biology 1 | 4 |
| CSCI-111 | Intro. to Java Programming | 4 |
| MATH-255 | Calculus 2 | 4 |
| PHYS-132 | University Physics 1 | 4 |
| | | 19 |
| Semester 3 | | |
| Course No. | Course Title | Credits |
| ENGR-320 | Circuit Analysis 1 | 3 |
| ENGR-324 | Electrical Engineering Lab 1 | 1 |
| CSCI-321 | Computer Organization & Digital Logic | 4 |
| CSCI-401 | Data Structures & Algorithms | 4 |
| MATH-355 | Calculus 3 | 4 |
| --- | Elective: Social Science/Humanities | 3 |
| | | 19 |
| *Semester 4 | | |
| Course No. | Course Title | Credits |
| ENGR-420 | Circuit Analysis 2 | 3 |
| ENGR-427 | Electrical Engineering Lab 2 | 1 |
| MATH-439 | Linear Algebra | 3 |
| MATH-440 | Linear Algebra Laboratory | 1 |
| MATH-455 | Differential Equations | 4 |
| PHYS-232 | University Physics 2 | 4 |
| --- | Elective: Social Science/Humanities | 3 |
| | | 19 |

*Computer Engineering majors should also enroll in MATH-376, Discrete Structures, at STCC. If possible, a student should also take ECE 232, Hardware Organization and Design, at UMass in Semester 4.

| *Electrical Engineering (ENGR.AS) | | |
|--|--|----------------|
| Semester 1 | | |
| Course No. | Course Title | Credits |
| ENG-101 | English Composition 1 | 3 |
| CHEM-103 | General Chemistry 1 | 4 |
| ENGR-203 | Computer Applications in Engineering | 4 |
| MATH-155 | Calculus 1 | 4 |
| --- | Elective: Social Science | 3 |
| | | 18 |
| Semester 2 | | |
| Course No. | Course Title | Credits |
| ENG-102 | English Composition 2 | 3 |
| BIOL-106 | General Biology 1 | 4 |
| CSCI-111 | Intro. to Java Programming | 4 |
| MATH-255 | Calculus 2 | 4 |
| PHYS-132 | University Physics 1 | 4 |
| | | 19 |
| Semester 3 | | |
| Course No. | Course Title | Credits |
| ENGR-320 | Circuit Analysis 1 | 3 |
| ENGR-324 | Electrical Engineering Lab 1 | 1 |
| CSCI-321 | Computer Organization & Digital Logic | 4 |
| CSCI-401 | Data Structures & Algorithms | 4 |
| MATH-355 | Calculus 3 | 4 |
| --- | Elective: Social Science/Humanities | 3 |
| | | 19 |
| Semester 4 | | |
| Course No. | Course Title | Credits |
| ENGR-420 | Circuit Analysis 2 | 3 |
| ENGR-427 | Electrical Engineering Lab 2 | 1 |
| MATH-455 | Differential Equations | 4 |
| MATH-439 | Linear Algebra | 3 |
| MATH-440 | Linear Algebra Laboratory | 1 |
| PHYS-232 | University Physics 2 | 4 |
| --- | Elective: Social Science/Humanities | 3 |
| | | 19 |

*Electrical Engineering majors should also enroll in ECE 232, .Hardware Organization and Design at UMass in semester 4 if possible.

| Mechanical & Industrial Engineering (ENGR.AS) Tentative Curriculum Fall 2014 | | |
|---|---|-----------|
| Semester 1 | | |
| Course No. | Course Title | Credits |
| ENG-101 | English Composition 1 | 3 |
| CHEM-103 | General Chemistry 1 | 4 |
| ENGR-203 | Computer Applications in Engineering | 4 |
| MATH-155 | Calculus 1 | 4 |
| --- | Elective: Social Science | 3 |
| | | <u>18</u> |
| Semester 2 | | |
| Course No. | Course Title | Credits |
| ENG-102 | English Composition 2 | 3 |
| BIOL-106 | General Biology 1 | 4 |
| CSCI-110 | Introduction to Computer Science 1 (C++) | 4 |
| MATH-255 | Calculus 2 | 4 |
| PHYS-132 | University Physics 1 | 4 |
| | | <u>19</u> |
| Semester 3 | | |
| Course No. | Course Title | Credits |
| ENGR-310 | Mechanics 1 (Statics) | 3 |
| ENGR-330 | Introduction to Materials Science & Engineering | 3 |
| MATH-355 | Calculus 3 | 4 |
| PHYS-232 | University Physics 2 | 4 |
| --- | Elective: Social Science/Humanities | 3 |
| | | <u>17</u> |
| *Semester 4 | | |
| Course No. | Course Title | Credits |
| ENGR-335 | Mechanics of Materials | 3 |
| ENGR-350 | Engineering Thermodynamics | 3 |
| ENGR-351 | Engineering Thermodynamics Computational | 1 |
| ENGR-411 | Laboratory | 3 |
| MATH-455 | Probability & Statistics for Engineers | 4 |
| --- | Differential Equations | 3 |
| | Elective: Social Science/Humanities | |
| | | <u>17</u> |

****Mechanical and Industrial Engineering Majors should also enroll in ENGR-410, Mechanics 2 (Dynamics) in Semester 4 if possible.**

| Computer Science Transfer (CSCI.AS) | | |
|--|--|----------------|
| Semester 1 | | |
| Course No. | Course Title | Credits |
| ENG-101 | English Composition 1 | 3 |
| CSCI-100 | Introduction to Computer Science | 4 |
| CSCI-111 | Introduction to the Java Programming Language | 4 |
| MATH-155 | Calculus 1 | 4 |
| --- | Elective: Social Science | 3 |
| | | 18 |
| Semester 2 | | |
| Course No. | Course Title | Credits |
| ENG-102 | Composition 2: Introduction to Literature | 3 |
| PHYS-132 | University Physics 1 | 4 |
| CSCI-211 | Intermediate Topics in Java Programming | 4 |
| MATH-255 | Calculus 2 | 4 |
| --- | Elective: Humanities/Social Science | 3 |
| | | 18 |
| Semester 3 | | |
| Course No. | Course Title | Credits |
| CSCI-321 | Computer Organization & Digital Logic | 4 |
| CSCI-401 | Data Structures & Algorithms | 4 |
| PHYS-232 | University Physics 2 | 4 |
| MATH-355 | Calculus 3 | 4 |
| --- | Elective: Social Science/Humanities | 3 |
| | | 19 |
| Semester 4 | | |
| Course No. | Course Title | Credits |
| MATH-376 | Discrete Structures | 4 |
| CSET-256 or | Linux Command and Shell Programming or | 3 |
| CSET-384 | Computer and Network Security | |
| MATH-439 | Linear Algebra | 3 |
| --- | Elective: Computer Science, Engineering, or | 3 (4) |
| --- | Mathematics | 3 |
| | Elective: Social Science/Humanities | |
| | | 17 (18) |

*Computer Science Majors planning on transferring to UMASS, who did not take 4 years of a foreign language in high school, should consider taking two semesters of a foreign language as humanities electives.

Technical Engineering (TECH.AS)
Tentative Curriculum Fall 2014

Semester 1

| Course No. | Course Title | Credits |
|-----------------------------|--|-----------|
| ENG-101 | English Composition 1 | 3 |
| MECH-185 | Computer Apps in Engr. or CAD 1:2D Fundamentals | 4 |
| MECH-186 | Engineering Drawing Practices | 3 |
| MATH-132 or MATH-155 | Technical Math 1 or Calculus 1 | 4 |
| PHYS-130 or PHYS-132 | College Physics 1 or University Physics 1 | 4 |
| | | 18 |

Semester 2

| Course No. | Course Title | Credits |
|-----------------------------|---|-----------|
| CHEM-101 or CHEM-103 | Survey of Chemistry 1 or General Chemistry 1 | 4 |
| ENGL-202 | Technical Report Writing | 3 |
| MATH-232 or MATH-255 | Technical Math 2 or Calculus 2 | 4 |
| PHYS-230 or PHYS-232 | College Physics 2 or University Physics 2 | 4 |
| --- | Elective: Social Science/Humanities | 3 |
| | | 18 |

Semester 3

| Course No. | Course Title | Credits |
|-----------------------------------|---|-----------|
| CPMA-160 | Computer Basics: Concepts & Applications | 4 |
| or ENGR-203 | or Computer Apps in Engr. | |
| ESET-141 & ESET-145 | Electric Circuits & Lab | 3 |
| or ENGR-320 & ENGR-324 | or Circuit Analysis 1 & Electrical Engr. Lab 1 | |
| CIVL-345 | Statics & Strength of Materials | 4 |
| or ENGR-310 | or Mechanics 1 (Statics) | 3 |
| MATH-155 or MATH-355 | Calculus 1 or Calculus 3 | |
| --- | Elective: Math/Science/Technical | 3 |
| | | 17 |

Semester 4

| Course No. | Course Title | Credits |
|---------------------------------------|--|-----------|
| CSCI-110, CSCI-111 or CSCI-100 | Intro to Computer Sci. I, Intro. to Java Prog. or Intro. to Computer Sci. | 4 |
| ESET-260 & ESET-265 | Digital Systems & Lab | 4 |
| or ENGR-420 & ENGR-427 | or Circuit Analysis 2 & Electrical Engr. Lab 2 | |
| CIVL-446 or ENGR-335 | Structures or Mechanics of Materials | 3 |
| MATH-255 or MATH-455 | Calculus 2 or Differential Equations | 4 |
| --- | Elective: Social Science or Humanities | 3 |
| | | 18 |

Biology (BIOL.AS)
Tentative Curriculum Fall 2014

Semester 1

| Course No. | Course Title | Credits |
|-------------------|------------------------------|----------------|
| ENG-101 | English Composition 1 | 3 |
| BIOL-106 | General Biology 1 | 4 |
| CHEM-103 | General Chemistry 1 | 4 |
| MATH-155 | Calculus 1 | 4 |
| SOC-101 | Intro. to Sociology | 3 |
| | | 18 |

Semester 2

| Course No. | Course Title | Credits |
|---------------------------------------|--|----------------|
| ENG-102 | Composition 2: Introduction to Literature | 3 |
| BIOL-206 | General Biology 2 | 4 |
| CHEM-203 | General Chemistry 2 | 4 |
| MATH-255 or STAT-142 | Calculus 2 or Statistics | 4 |
| PSY-101 | General Psychology | 3 |
| | | 18 |

Semester 3

| Course No. | Course Title | Credits |
|-------------------|-------------------------------------|----------------|
| CHEM-320 | Organic Chemistry 1 | 4 |
| PHYS-130 | College Physics 1 | 4 |
| BIOL-360 | Genetics | 4 |
| --- | Elective: General Education* | 3 |
| --- | Elective: Social Science | 3 |
| | | 18 |

Semester 4

| Course No. | Course Title | Credits |
|-------------------|-------------------------------------|----------------|
| CHEM-420 | Organic Chemistry 2 | 4 |
| PHYS-230 | College Physics 2 | 4 |
| --- | Elective: Biology** | 4 |
| --- | Elective: General Education* | 3 |
| --- | Elective: Humanities | 3 |
| | | 18 |

*These General Electives must be courses that will transfer into a 4-year biology curriculum. Biology Majors planning on transferring to UMASS, who did not take 4 years of a foreign language in high school, should consider taking two semesters of a foreign language as humanities electives.

**Elective to be selected from: BIOL-113, Environmental Biology; BIOL-121, Microbiology; BIOL-132, Anatomy & Physiology 1; BIOL-310, Invertebrate Zoology; and BIOL-351, Cell Biology.

| Chemistry (CHEM.AS) | | |
|-------------------------|--|-----------|
| Semester 1 | | |
| Course No. | Course Title | Credits |
| ENG-101 | English Composition 1 | 3 |
| CHEM-103 | General Chemistry 1 | 4 |
| ENGR-203 or CSCI-100 | Computer Apps. in Engineering or Intro. to Computer Science | 4 |
| MATH-155 | Calculus 1 | 4 |
| --- | Elective: Humanities/Social Science* | 3 |
| | | <u>18</u> |
| Semester 2 | | |
| Course No. | Course Title | Credits |
| ENG-102 | Composition 2: Introduction to Literature | 3 |
| CHEM-203 | General Chemistry 2 | 4 |
| MATH-255 | Calculus 2 | 4 |
| --- | Elective: Math/Science/Technical** | 3 |
| --- | Elective: Humanities/Social Science* | 3 |
| | | <u>17</u> |
| Semester 3 | | |
| Course No. | Course Title | Credits |
| CHEM-320 | Organic Chemistry 1 | 4 |
| MATH-355 | Calculus 3 | 4 |
| PHYS-130 or PHYS-132 | College Physics 1 or University Physics 1*** | 4 |
| --- | Elective: Math/Science/Technical** | 3 |
| --- | Elective: Humanities/Social Science* | 3 |
| | | <u>18</u> |
| Semester 4 | | |
| Course No. | Course Title | Credits |
| CHEM-420 | Organic Chemistry 2 | 4 |
| MATH-455 | Differential Equations | 4 |
| PHYS-230 or PHYS-232 | College Physics 2 or University Physics 2*** | 4 |
| --- | Elective: Math/Science/Technical** | 3 |
| --- | Elective: Humanities/Social Science | 3 |
| | | <u>18</u> |

*Chemistry Majors planning on transferring to UMASS, who did not take 4 years of a foreign language in high school, should consider taking two semesters of a foreign language as humanities electives. **Check the curriculum of the school you plan to attend, as well as your advisor, to determine what these electives should be. ***Students intending to transfer to UMass should take PHYS-132 and PHYS-232.

| Pre-Med/Pre-Dental/Pre-Vet (MDVT.AS) | | |
|--------------------------------------|---|-----------|
| Semester 1 | | |
| Course No. | Course Title | Credits |
| ENG-101 | English Composition 1 | 3 |
| BIOL-106 | General Biology 1 | 4 |
| CHEM-103 | General Chemistry 1 | 4 |
| MATH-132 | Technical Math 1 | 4 |
| or MATH-155 | or Calculus 1 | |
| SOC-101 | Introduction to Sociology | 3 |
| | | <u>18</u> |
| Semester 2 | | |
| Course No. | Course Title | Credits |
| ENG-102 | Composition 2: Introduction to Literature | 3 |
| BIOL-206 | General Biology 2 | 4 |
| CHEM-203 | General Chemistry 2 | 4 |
| MATH-232 | Technical Math 2 | 4 |
| or MATH-255 | or Calculus 2 | |
| PSY-101 | General Psychology | 3 |
| | | <u>18</u> |
| Semester 3 | | |
| Course No. | Course Title | Credits |
| CHEM-320 | Organic Chemistry 1 | 4 |
| PHYS-130 | College Physics 1 | 4 |
| BIOL-360 | Genetics | 4 |
| --- | Elective: General Education* | 3 |
| --- | Elective: Social Science | 3 |
| | | <u>18</u> |
| Semester 4 | | |
| Course No. | Course Title | Credits |
| CHEM-420 | Organic Chemistry 2 | 4 |
| PHYS-230 | College Physics 2 | 4 |
| --- | Elective: Biology** | 4 |
| --- | Elective: Humanities | 3 |
| --- | Elective: General Education* | 3 |
| | | <u>18</u> |

*Check the curriculum of the school you plan to attend to determine what these electives should be.

**Elective to be selected from: BIOL-113, Environmental Biology; BIOL-121, Microbiology; BIOL-132, Anatomy & Physiology 1; BIOL-310, Invertebrate Zoology; BIOL-351, Cell Biology.

| *Pre-Pharmacy (Select Pre-Med or Biology option instead.) | | |
|--|--|----------------|
| Semester 1 | | |
| Course No. | Course Title | Credits |
| ENG-101 | English Composition 1 | 3 |
| BIOL-106 | Biology 1 | 4 |
| CHEM-103 | General Chemistry 1 | 4 |
| MATH-155 | Calculus 1 | 4 |
| --- | Elective: Social Science** | 3 |
| | | 18 |
| Semester 2 | | |
| Course No. | Course Title | Credits |
| ENG-102 | Composition 2: Introduction to Literature | 3 |
| BIOL-206 | Biology 2 | 4 |
| CHEM-203 | General Chemistry 2 | 4 |
| MATH-255 | Calculus 2 | 4 |
| --- | Elective: Social Science** | 3 |
| | | 18 |
| Semester 3 | | |
| Course No. | Course Title | Credits |
| MAST-101 (AA101) | Medical Terminology | 3 |
| CHEM-320 | Organic Chemistry 1 | 4 |
| PHYS-130 | College Physics 1 | 4 |
| SOC-101 | Introduction to Sociology | 3 |
| --- | Elective: Social Science or Humanities** | 3 |
| | | 17 |
| Semester 4 | | |
| Course No. | Course Title | Credits |
| BIOL-121 | Microbiology | 4 |
| CHEM-420 | Organic Chemistry 2 | 4 |
| PHYS-230 | College Physics 2 | 4 |
| --- | Elective: Social Science or Humanities** | 3 |
| --- | Elective: General Education*** | 3 |
| | | 18 |

*Due to extreme competition at both the freshmen and transfer level, with no guarantee of transferability, STCC has discontinued this option. However, Students interested in Pre-Pharmacy can complete most of the courses required in the first two years of a pharmacy program by enrolling in the Pre-Med or Biology option.

Most Pharmacy schools require ECON-100, Economics 1; HIST-100, Survey of Early Western Civilization; and HIST-200, Survey of Modern Western Civilization, for social science/humanities electives. *Check the curriculum of the school you plan to attend to determine what this elective should be.

| Mathematics (MATH.AS) | | |
|------------------------------|--|----------------|
| Semester 1 | | |
| Course No. | Course Title | Credits |
| ENG-101 | English Composition 1 | 3 |
| CHEM-103 | General Chemistry 1 | 4 |
| CSCI-111 | Intro. to the Java Programming Language | 4 |
| MATH-155 | Calculus 1 | 4 |
| --- | Elective: Humanities/Social Science* | 3 |
| | | 18 |
| Semester 2 | | |
| Course No. | Course Title | Credits |
| ENG-102 | English Composition 2: Introduction to Literature | 3 |
| CHEM-203 | General Chemistry 2 | 4 |
| MATH-255 | Calculus 2 | 4 |
| PHYS-132 | University Physics 1 | 4 |
| --- | Elective: Humanities/Social Science* | 3 |
| | | 18 |
| Semester 3 | | |
| Course No. | Course Title | Credits |
| MATH-355 | Calculus 3 | 4 |
| PHYS-232 | University Physics 2 | 4 |
| --- | Elective: Math/Science/Technical** | 3 |
| --- | Elective: Humanities/Social Science* | 3 |
| --- | Elective: General Education** | 3 |
| | | 17 |
| Semester 4 | | |
| Course No. | Course Title | Credits |
| MATH-455 | Differential Equations | 4 |
| MATH-439 | Linear Algebra | 3 |
| MATH-440 | Linear Algebra Lab | 1 |
| MATH-376 | Discrete Structures | 3 |
| --- | Elective: Humanities/Social Science* | 3 |
| --- | Elective: General Education** | 3 |
| | | 17 |

*Math Majors planning on transferring to UMASS, who did not take 4 years of a foreign language in high school, should consider taking two semesters of a foreign language as humanities electives.

**Check the curriculum of the school that you plan to attend to determine what these electives should be.

| Physics (PHYS.AS) | | |
|-------------------|---|----------|
| Semester 1 | | |
| Course No. | Course Title | Credits |
| ENG-101 | English Composition 1 | 3 |
| CHEM-103 | General Chemistry 1 | 4 |
| CSCI-111 | Intro. to the Java Programming Language | 4 |
| MATH-155 | Calculus 1 | 4 |
| --- | Elective: Humanities/Social Science* | 3 |
| | | <hr/> 18 |
| Semester 2 | | |
| Course No. | Course Title | Credits |
| ENG-102 | English Composition 2: Introduction to Literature | 3 |
| CHEM-203 | General Chemistry 2 | 4 |
| MATH-255 | Calculus 2 | 4 |
| PHYS-132 | University Physics 1 | 4 |
| --- | Elective: Humanities/Social Science* | 3 |
| | | <hr/> 18 |
| Semester 3 | | |
| Course No. | Course Title | Credits |
| MATH-355 | Calculus 3 | 4 |
| PHYS-232 | University Physics 2 | 4 |
| --- | Elective: Math/Science/Technical** | 3 |
| --- | Elective: Humanities/Social Science* | 3 |
| --- | Elective: General Education** | 3 |
| | | <hr/> 17 |
| Semester 4 | | |
| Course No. | Course Title | Credits |
| MATH-455 | Differential Equations | 4 |
| PHYS-332 | University Physics 3 | 4 |
| --- | Elective: Math/Science/Technical** | 3 |
| --- | Elective: Humanities/Social Science* | 3 |
| --- | Elective: General Education** | 3 |
| | | <hr/> 17 |

*Physics Majors planning on transferring to UMASS, who did not take 4 years of a foreign language in high school, should consider taking two semesters of a foreign language as humanities electives.

**Check the curriculum of the school that you plan to attend to determine what these electives should be.