

ARTICULATION AGREEMENT
IN ENGINEERING
BETWEEN
JAMESTOWN COMMUNITY COLLEGE
AND
L.C. SMITH COLLEGE OF ENGINEERING AND COMPUTER SCIENCE
AT SYRACUSE UNIVERSITY

PURPOSE OF AGREEMENT

This document establishes a transfer articulation agreement between Jamestown Community College and L.C. Smith College of Engineering and Computer Science (LCS) at Syracuse University (SU). Its purpose is to afford students the opportunity to pre-plan their college careers, and to facilitate the transfer process from Jamestown Community College to the Bachelor of Science (B.S.) degree programs in aerospace engineering, bioengineering (bioinstrumentation), bioengineering (biomechanics), chemical engineering, civil engineering, computer engineering, electrical engineering, environmental engineering, and mechanical engineering at Syracuse University.

GENERAL GUARANTEE OF ADMISSION AND STANDING

Students who are in their second year of the A.S. Engineering Science degree program at Jamestown Community College, and who have and maintain a minimum Jamestown Community College grade point average of 3.0 or better, are guaranteed acceptance into the engineering degree program of their choice at Syracuse University provided that space is available when applications are received. Students who transfer 60 or more credit hours to Syracuse University are granted junior standing.

GENERAL GUARANTEE OF OPPORTUNITY TO GRADUATE

Students who graduate from Jamestown Community College having earned a minimum grade of C in each of the Jamestown Community College courses listed for any of the bachelor's degrees in Appendix A of this agreement are guaranteed the opportunity to earn that bachelor's degree with four semesters of normal coursework at Syracuse University.

PROMOTION OF AGREEMENT

Both parties have the right to use this agreement and the names Jamestown Community College and the L.C. Smith College of Engineering and Computer Science at Syracuse University in all promotional activities including college catalogs and recruitment or advisement activities.

PROVISION FOR CHANGES IN POLICIES OR CURRICULA

Proposed changes in policies or curricula by either party should be communicated in writing to the other party.

EFFECTIVE DATE AND PROVISION FOR CANCELLATION

This agreement goes into effect when signed by all individuals listed below. Either party may independently cancel this agreement by notifying the other party in writing no less than one year before the intended date of cancellation.

College of Engineering and Computer Science

Aerospace Engineering Name

Effective Fall 2006 SUID

J C C F I R ST-YEAR SOPHOMORE JUNIOR SENIOR VAR

C r e d i t F S F S F S F S +/-

MATHEMATICS (18)

MAT295 Calculus 1 **MAT 1710** 4

MAT296 Calculus 2 **MAT 1720** 4

MAT397 Calculus 3 **MAT 2650** 4

MAT331 Linear Algebra **MAT 2670** 3

MAT514 Intro. Differential Equations **MAT 2680** 3

SCIENCES (12)

CHE106 General Chemistry 1 **CHE 1550** 3

CHE107 General Chemistry Lab 1 **CHE 1550** 1

PHY211 General Physics 1 **PHY 1720** 3

PHY221 General Physics Lab 1 **PHY 1720** 1

PHY212 General Physics 2 **PHY 2710** 3

PHY222 General Physics Lab 2 **PHY 2710** 1

ENGLISH/SOCIAL SCIENCE/HUMANITIES (12)

WRT105 Studio 1: Practices of Academic Writing **ENG 1510** 3

WRT205 Studio 2: Critical Research and Writing 3

SSH Elective _____ **SSH** 3

SSH Elective _____ **SSH** 3

PROGRAM CUSTOMIZATION (18)

Course1 _____ 3

Course2 _____ 3

Course3 _____ 3

Course4 _____ 3

Course5 _____ 3

Course6 _____ 3

ENGINEERING (26)

ECS101 Intro. to Engr. & Comp. Sci. **ENR 1560** 3

ECS104 Engr. Comp. Tools **CSC 1710** 3

ECS221 Statics **ENR 2550** 3

ECS222 Dynamics **ENR 2560** 3

ECS325 Mechanics of Solids **ENR 2580** 4

ECS326 Engr. Materials, Prop. & Proc. 3

ELE231 Elec. Engr. Fundamentals 1 **ENR 2740** 3

ELE291 Electrical Laboratory I 1

ELE312 Control Systems 3

AEROSPACE ENGINEERING (42)

AEE342 Aerodynamics 4

AEE343 Compressible Flow 3

AEE427 Dynamics of Aero. Vehicles 4

AEE446 Propulsion 3

AEE471 Des. & Anal. of Aero. Struct. 4

AEE472 Syn. of Aerospace Systems 4

AEE577 Space Flt. & Rockets 3

MAE184 Engr. Graphics & CAD 3

MAE251 Thermodynamics 4

MAE315 Mech/Aero Lab I 3

MAE321 Dynamics of Mechanical Systems 3

MAE341 Fluid Mechanics 4

TOTAL CREDITS 58 17 17 17 17 16 14 13

College of Engineering and Computer Science

Bioengineering (Bioinstrumentation) NAME

Effective Fall 2006 SUID

J C C F I R S T-YEAR SOPHOMORE JUNIOR SENIOR VAR

C r e d i t F S F S F S F S +/-

MATHEMATICS (15)

MAT295 Calculus 1 **MAT 1710** 4

MAT296 Calculus 2 **MAT 1720** 4

MAT397 Calculus 3 **MAT 2650** 4

MAT485 Diff. Equations & Matrix Algebra ***MAT 2680** 3

SCIENCES (26)

BIO 121 or BIO 123 General Biology **BIO 1570** or **BIO 1580** 4

BIO 326/327 Genetics & Cell Biology I **OR II 3

**NEU 211 Introduction to Neuroscience 3

CHE106 General Chemistry 1 **CHE 1550** 3

CHE107 General Chemistry Lab 1 **CHE 1550** 1

CHE116 General Chemistry 2 **CHE 1560** 3

CHE117 General Chemistry Lab 2 **CHE 1560** 1

PHY211 General Physics 1 **PHY 1720** 3

PHY221 General Physics Lab 1 **PHY 1720** 1

PHY212 General Physics 2 **PHY 2710** 3

PHY222 General Physics Lab 2 **PHY 2710** 1

ENGLISH/SOCIAL SCIENCE/HUMANITIES (24)

WRT105 Studio 1: Practices of Academic Writing **ENG 1510** 3

WRT205 Studio 2: Critical Research and Writing 3

SSH Elective _____ **SSH 3**

SSH Elective _____ **SSH 3**

SSH Elective _____ 3

SSH Elective _____ 3

SSH Elective _____ 3

SSH Elective _____ 3

ENGINEERING (23)

ECS101 Intro. to Engineering & Computer Sci **ENR 1560** 3

CEN 212 Exp. Methods in Chem. & Bioengr 3

ECS221 Statics **ENR 2550** 3

ELE231 Electrical Engr. Fundamentals 1 **ENR 2740** 3

ELE232 Electrical Engr. Fundamentals 2 3

ELE291 Electrical Engr. Lab 1 1

ELE292 Electrical Engr. Lab 2 1

ELE352 Digital Signal Processing 3

CSE261 Digital Logic 3

BIOENGINEERING (36)

BEN205 Bioengineering Seminar 1

BEN305 Engr'g Analysis of Living Sys 1 4

BEN306 Engr'g Analysis of Living Sys 2 4

BEN/ELE312 Control Systems 3

BEN/ELE351 System and Signal Analysis 3

BEN 458 Biomedical Imaging 3

BEN465 Skeletal-Muscular Biomechs 4

BEN481 Bio-Instrumentation Lab 1 4

BEN482 Bio-Instrumentation Lab 2 4

BEN487 Bioengineering Capstone Design 3

BEN498 Senior Thesis 3

ELECTIVES (9)

Tech Elec _____ ***MAT 2670** 3

Tech Elec _____ **ENR 2580** 3

Tech Elec _____ 3

TOTAL CREDITS 59 17 17 18 16 16 17 16 16

***To receive credit for MAT 485, both MAT 2670 and MAT 2680 must be taken, MAT 2670 will be used as a Technical Elective.**

****JCC Technical Electives**

College of Engineering and Computer Science

Bioengineering (Biomechanics) Name

Effective Fall 2006 SUID

J C C F I R S T-YEAR SOPHOMORE JUNIOR SENIOR VAR

C r e d i t F S F S F S F S +/-

MATHEMATICS (15)

MAT295 Calculus 1 **MAT 1710** 4

MAT296 Calculus 2 **MAT 1720** 4

MAT397 Calculus 3 **MAT 2650** 4

MAT485 Diff. Equations & Matrix Algebra ***MAT 2680** 3

SCIENCES (26)

BIO121 or BIO 123 General Biology **BIO 1570 or BIO 1580** 4

BIO326/327 Genetics and Cell Biology I **OR II 3

**NEU 211 Introduction to Neuroscience 3

CHE106 General Chemistry 1 **CHE 1550** 3

CHE107 General Chemistry Lab 1 **CHE 1550** 1

CHE116 General Chemistry 2 **CHE 1560** 3

CHE117 General Chemistry Lab 2 **CHE 1560** 1

PHY211 General Physics 1 **PHY 1720** 3

PHY221 General Physics Lab 1 **PHY 1720** 1

PHY212 General Physics 2 **PHY 2710** 3

PHY222 General Physics Lab 2 **PHY 2710** 1

ENGLISH/SOCIAL SCIENCE/HUMANITIES (24)

WRT105 Studio 1: Practices of Academic Writing **ENG 1510** 3

WRT205 Studio 2: Critical Research and Writing 3

SSH Elective _____ **SSH 3**

SSH Elective _____ **SSH 3**

SSH Elective _____ 3

SSH Elective _____ 3

SSH Elective _____ 3

SSH Elective _____ 3

ENGINEERING (24)

ECS101 Intro. to Engr. & Comp. Sci **ENR 1560** 3

*CEN212 Exp. Methods in Chem. & Bioengr. 3

ECS221 Statics **ENR 2550** 3

ECS325 Mechanics of Materials **ENR 2580** 4

ECS326 Engr. Materials, Prop. & Proc. 3

ELE231 Elec. Engr. Fundamentals 1 **ENR 2740** 3

ELE232 Elec. Engr. Fundamentals 2 3

ELE291 Elec. Engr. Lab I 1

ELE292 Elec. Engr. Lab II 1

BIOENGINEERING (35)

BEN205 Bioengineering Seminar 1

BEN305 Engr. Analysis of Living Sys 1 4

BEN306 Engr. Analysis of Living Sys 2 4

BEN/ELE312 Control Systems 3

BEN/ELE351 System and Signal Analysis 3

BEN465 Skeletomuscular Biomechanics 4

BEN466 Advanced Biomechanics 4

BEN467 Advanced Biomechanics Lab 3

BEN 468 Biomaterials 3

BEN487 Bioengineering Capstone Design 3

BEN498 Senior Thesis 3

ELECTIVES (9)

Tech Elec _____ ***MAT 2670** 3

Tech Elec _____ 3

Tech Elec _____ 3

TOTAL CREDITS 60 17 17 18 16 17 17 16 15

***To receive credit for MAT 485, both MAT 2670 and MAT 2680 must be taken, MAT 2670 will be used as a Technical Elective.**

****JCC Technical Elective**

College of Engineering and Computer Science

Chemical Engineering Name

Effective Fall 2006 SUID

J C C F I R ST YEAR SOPHOMORE JUNIOR SENIOR VAR

C r e d i t F S F S F S F S +/-

MATHEMATICS (15)

MAT295 Calculus 1 **MAT 1710** 4

MAT296 Calculus 2 **MAT 1720** 4

MAT397 Calculus 3 **MAT 2650** 4

MAT485 Diff. Equations & Matrix Algebra ***MAT 2680** 3

SCIENCES (29)

CHE106 General Chemistry 1 **CHE 1550** 3

CHE107 General Chemistry Lab 1 **CHE 1550** 1

CHE116 General Chemistry 2 **CHE 1560** 3

CHE117 General Chemistry Lab 2 **CHE 1560** 1

CHE275 Organic Chemistry 1 **CHE 2530** 3

CHE276 Organic Chemistry Lab 1 2

CHE346 Physical Chemistry 1 3

CHE347 Physical Chemistry Lab 1 2

CHE356 Physical Chemistry 2 3

PHY211 General Physics 1 **PHY 1720** 3

PHY221 General Physics Lab 1 **PHY 1720** 1

PHY212 General Physics 2 **PHY 2710** 3

PHY222 General Physics Lab 2 **PHY 2710** 1

ENGLISH/SOCIAL SCIENCE/HUMANITIES (27)

WRT105 Studio 1: Practices of Academic Writing **ENG 1510** 3

WRT205 Studio 2: Critical Research and Writing 3

WRT307 Adv. Wrt Studio: Professional Writing 3

SSH Elective _____ **SSH** 3

SSH Elective _____ **SSH** 3

SSH Elective _____ 3

SSH Elective _____ 3

SSH Elective _____ 3

SSH Elective _____ 3

ENGINEERING (9)

ECS101 Intro. to Engr. & Comp. Sci. **ENR 1560** 3

ECS104 Engr. Comput. Tools **CSC 1710** 3

ECS326 Engr. Materials, Prop. & Proc. 3

CHEMICAL ENGINEERING (36)

CEN212 Exp. Methods in Chem & Bioengr. 3

CEN231 Intro. to Chem. Engr. Principles 3

CEN252 Chem.Engr. Thermodynamics 1 3

CEN311 Chemical Engineering Lab 1 2

CEN333 Chem. Engr. Fluid Mechanics 3

CEN341 Fund. Of Heat & Mass Trsfr 4

CEN353 Chem.Engr. Thermodynamics 2 3

CEN412 Chemical Engineering Lab 2 2

CEN542 Mass & Heat Trans.Operation 3

CEN574 Process Design 4

***To receive credit for MAT 485, both MAT 241 and MAT 264 must be taken, MAT 241 will be used as a Technical Elective.**

****OCC Technical Elective**

College of Engineering & Computer Science

Civil Engineering Name

Effective Fall 2006 SUID

J C C FIRST-YEAR SOPHOMORE JUNIOR SENIOR VAR

C r e d i t F S F S F S F S +/-

MATHEMATICS (15)

MAT295 Calculus 1 **MAT 1710** 4

MAT296 Calculus 2 **MAT 1720** 4

MAT397 Calculus 3 **MAT 2650** 4

MAT485 Diff. Equations & Matrix Algebra ***MAT 2680** 3

SCIENCES (16)

CHE106 General Chemistry 1 **CHE 1550** 3

CHE107 General Chemistry Lab 1 **CHE 1550** 1

CHE116 General Chemistry 2 **CHE 1560** 3

CHE117 General Chemistry Lab 2 **CHE 1560** 1

PHY211 General Physics 1 **PHY 1720** 3

PHY221 General Physics Lab 1 **PHY 1720** 1

PHY212 General Physics 2 **PHY 2710** 3

PHY222 General Physics Lab 2 **PHY 2710** 1

ENGLISH/SOCIAL SCIENCE/HUMANITIES (27)

WRT105 Studio 1: Practices of Academic Writing **ENG 1510** 3

WRT205 Studio 2: Critical Research and Writing 3

WRT307 Adv Writing Studio: Professional Writing 3

SSH Elective _____ **SSH 3**

SSH Elective _____ **SSH 3**

SSH Elective _____ 3

SSH Elective _____ 3

SSH Elective _____ 3

SSH Elective _____ 3

ENGINEERING (12/13)

ECS101 Intro. to Engr. & Comp. Sci. **ENR 1560** 3

ECS 104 Engr. Comp. Tools **CSC 1710** 3

ECS221 Statics **ENR 2550** 3

Select One of the Following 3 Courses: ENR 2560 3

ECS222 Dynamics (3)

ELE231 Elec. Engr. Fundamentals I (3 or 4)

MAE251 Thermodynamics (4)

CIVIL ENGINEERING (42) D=14.00

CIE272 Civil Engineering Analysis 3

ECS325 Mechanics of Materials **ENR 2580** 4

ECS326 Engr. Materials, Prop. & Proc. 3

MAE341/CIE327 Fluid Mechanics 4

CIE331 Analysis of Structures and Materials 3

CIE332 Design of Concrete Structures 2.00 3

CIE337 Soil Mech. & Foundations 1 1.00 4

CIE338 Soil Mech. & Foundations 2 2.00 3

CIE341 Environmental Engineering 1 1.00 3

CIE352 Water Resources Engr. 2.00 4

***To receive credit for MAT 485, both MAT 2680 and MAT 2670 must be taken, MAT 2670 will be used as a Professional Elective.**

College of Engineering and Computer Science

Computer Engineering Name _____

Effective Fall 2006 SUID _____

Concentration (circle one): HWS or SWS JCC FIRST-YEAR SOPHOMORE JUNIOR SENIOR VAR

Minor(s), if any: _____ Credit F S F S F S F S +/-

MATHEMATICS (21)

CIS275 Intro to Discrete Mathematics **MAT 1670** 3

MAT295 Calculus 1 **MAT 1710** 4

MAT296 Calculus 2 **MAT 1720** 4

MAT397 Calculus 3 **MAT 2650** 4

MAT521 Intro. to Probability and Statistics* 3

MAT581 Num. Methods with Programming 3

SCIENCES (12)

CHE106 General Chemistry 1 **CHE 1550** 3

CHE107 General Chemistry Lab 1 **CHE 1550** 1

PHY211 General Physics 1 **PHY 1720** 3

PHY221 General Physics Lab 1 **PHY 1720** 1

PHY212 General Physics 2 **PHY 2710** 3

PHY222 General Physics Lab 2 **PHY 2710** 1

ENGLISH (12)

WRT105 Studio 1: Practices of Academic Writing **ENG 1510** 3

WRT205 Studio 2: Critical Research and Writing 3

WRT307 Adv. Wrt Studio: Professional Writing 3

WRT407 Adv. Wrkshp in Prof, Tech, or Disc. Writing 3

SOC. SCIENCE/HUMANITIES/GEN. ED. (12)

ECS392 Ethical Aspects of ECS 3

PHI 251 Logic **PHL 2650** 3

SSH Elective _____ **SSH** 3

SSH Elective _____ **SSH** 3

ENGINEERING (17)

ECS101 Intro. to Engr. & Comp. Sci. **ENR 1560** 3

ECS102 Intro. to Computing **CSC 1710** 3

ELE231 Electrical Engr. Fundamentals I **ENR 2740** 3

ELE232 Electrical Engr. Fundamentals II 3

ELE291 Electrical Lab. 1 1

ELE292 Electrical Lab. 2 1

ELE331 Digital Circuits & Systems 3

COMPUTER ENGINEERING (31)

CSE261 Digital Logic Design 3

CSE281 Comp. Org. & Assem. Lang. 3

CSE283 Intro. To Object-Oriented Design 3

CSE351 Mathematical Analysis of Digital Systems 3

CSE381 Computer Architecture 3

CSE382 Algorithms & Data Structures 3

CSE397 Computer Laboratory 1 3

CSE398 Computer Laboratory 2 3

CSE497 Senior Design Project 3

CSE497 Senior Design Project 1

CSE585 Design of Operating Systems 3

TECHNICAL ELECTIVES (15)

Tech Elective _____ 3

** **JCC Technical Elective**

College of Engineering and Computer Science

Electrical Engineering Name

Effective Fall 2006 SUID

Track: _____ JCC FIRST-YEAR SOPHOMORE JUNIOR SENIOR VAR

Minor: _____ Credits F S F S F S F S +/-

MATHEMATICS (18)

MAT295 Calculus 1 **MAT 1710** 4

MAT296 Calculus 2 **MAT 1720** 4

MAT397 Calculus 3 **MAT 2650** 4

MAT485 Diff. Equations & Matrix Algebra ***MAT 2680** 3

MAT521 Probability and Statistics+ 3

SCIENCES (15)

CHE106 General Chemistry 1 **CHE 1550** 3

CHE107 General Chemistry Lab 1 **CHE 1550** 1

PHY211 General Physics 1 **PHY 1720** 3

PHY221 General Physics Lab 1 **PHY 1720** 1

PHY212 General Physics 2 **PHY 2710** 3

PHY222 General Physics Lab 2 **PHY 2710** 1

Science/Math Elective _____ **CHE 1560** 3

ENGLISH (12)

WRT105 Studio 1: Practices of Academic Writing **ENG 1510** 3

WRT205 Studio 2: Critical Research and Writing 3

WRT307 Adv. Writing Studio: Professional Writing 3

WRT407 Adv. Wrkshp in Prof. Tech, or Disc. Writing 3

SOC. SCIENCE/HUMANITIES/GEN. ED. (18)

SSH Elective _____ **SSH** 3

SSH Elective _____ **SSH** 3

SSH Elective _____ 3

ECS392 Ethical Aspects of ECS 3

Non-Tech Elective _____ ***MAT 2670** 3

Non-Tech Elective _____ 3

ENGINEERING (9)

ECS101 Intro. to Engr. & Comp. Sci. **ENR 1560** 3

ECS102 Intro. to Computing **CSC 1710** 3

CSE261 Digital Logic Design 3

ELECTRICAL ENGINEERING (42)

ELE231 Electrical Engr. Fundamentals 1 **ENR 2740** 3

ELE232 Electrical Engr. Fundamentals 2 3

ELE291 Electrical Engr. Lab. 1 1

ELE292 Electrical Engr. Lab. 2 1

ELE324 Electromagnetics 1 3

ELE325 Electromagnetics 2* 3

ELE331 Digital Circuits & Systems 3

ELE333 Analog Circuits 3

ELE346 Semiconductor Devices* 3

ELE351 System and Signal Analysis 3

ELE391 Digital Circuits Laboratory 3

ELE392 Analog Circuits Laboratory 3

ELE497 Senior Project 3 1

Select Two of the Following 3 Courses: 3

ELE312 Control Systems* 3

ELE352 Digital Signal Processing

ELE424 Fund. Of RF and Microwaves

TECHNICAL ELECTIVES (12)

Tech Elective _____ 3

FREE ELECTIVES (6)

*To receive credit for MAT 485, both MAT 2680 and MAT 2670 must be taken, MAT 2670 will be used as a Non-Technical Elective.

College of Engineering & Computer Science

Environmental Engineering Name

Effective Fall 2006 SUID

J C C FIRST-YEAR SOPHOMORE JUNIOR SENIOR VAR

C r e d i t F S F S F S F S +/-

MATHEMATICS (15)

MAT295 Calculus 1 **MAT 1710** 4

MAT296 Calculus 2 **MAT 1720** 4

MAT397 Calculus 3 **MAT 2650** 4

MAT485 Diff. Equations & Matrix Algebra ***MAT 2680** 3

SCIENCES (16)

CHE106 General Chemistry 1 **CHE 1550** 3

CHE107 General Chemistry Lab 1 **CHE 1550** 1

CHE116 General Chemistry 2 **CHE 1560** 3

CHE117 General Chemistry Lab 2 **CHE 1560** 1

PHY211 General Physics 1 **PHY 1720** 3

PHY221 General Physics Lab 1 **PHY 1720** 1

PHY212 General Physics 2 **PHY 2710** 3

PHY222 General Physics Lab 2 **PHY 2710** 1

ENGLISH/SOCIAL SCIENCE/HUMANITIES (27)

WRT105 Studio 1: Practices of Academic Writing **ENG 1510** 3

WRT205 Studio 2: Critical Research and Writing 3

WRT307 Adv Writing Studio: Professional Writing 3

SSH Elective _____ **SSH** 3

SSH Elective _____ **SSH** 3

SSH Elective _____ 3

SSH Elective _____ 3

SSH Elective _____ 3

SSH Elective _____ 3

ENGINEERING (12/13)

ECS101 Intro. to Engr. & Comp. Sci. **ENR 1560** 3

ECS104 Engr. Comp. Tools **CSC 1710** 3

ECS221 Statics **ENR 2550** 3

Select One of the Following 4 Courses: ENR 2560 3

ECS222 Dynamics (3)

ELE231 Elec. Engr. Fundamentals (3 or 4)

MAE251 Thermodynamics (4)

CHE346 Physical Chemistry (3)

ENVIRONMENTAL ENGINEERING (42) D=13/14.50

CIE272 Civil Engineering Analysis 3

ECS325 Mechanics of Materials **ENR 2580** 4

CIE326 Engineering Materials 3

MAE341/CIE327 Fluid Mechanics 4

CIE337 Soil Mech. & Foundations 1 1.00 4

CIE341 Environmental Engineering 1 1.00 3

CIE342 Environmental Engineering 2 2.00 4

CIE352 Water Resources Engr. 2.00 4

CIE471 Env. Chemistry Analysis 1.00 3

CIE472 Applied Env. Microbiology 1.00 3

***To receive credit for MAT 485, both MAT 2680 and MAT 2670 must be taken, MAT 2670 will be used as a Professional Elective.**

College of Engineering and Computer Science

Mechanical Engineering Name

Effective Fall 2006 SUID

J C C F I R S T-YEAR SOPHOMORE JUNIOR SENIOR VAR

C r e d i t F S F S F S F S +/-

MATHEMATICS (21)

MAT295 Calculus 1 **MAT 1710** 4

MAT296 Calculus 2 **MAT 1720** 4

MAT397 Calculus 3 **MAT 2650** 4

MAT331 Linear Algebra **MAT 2670** 3

MAT514 Intro. Differential Equations **MAT 2680** 3

MAT521 Intro. to Probability & Stats 3

SCIENCES (12)

CHE106 General Chemistry 1 **CHE 1550** 3

CHE107 General Chemistry Lab 1 **CHE 1550** 1

PHY211 General Physics 1 **PHY 1720** 3

PHY221 General Physics Lab 1 **PHY 1720** 1

PHY212 General Physics 2 **PHY 2710** 3

PHY222 General Physics Lab 2 **PHY 2710** 1

ENGLISH/SOCIAL SCIENCE/HUMANITIES (12)

WRT105 Studio 1: Practices of Academic Writing **ENG 1510** 3

WRT205 Studio 2: Critical Research and Writing 3

SSH Elective _____ **SSH 3**

SSH Elective _____ **SSH 3**

PROGRAM CUSTOMIZATION (21)

Course1 _____ 3

Course2 _____ 3

Course3 _____ 3

Course4 _____ 3

Course5 _____ 3

Course6 _____ 3

Course7 _____ 3

ENGINEERING (22)

ECS101 Intro. to Engr. & Comp. Sci. **ENR 1560** 3

ECS 104 Engr. Comp Tools **CSC 1710** 3

ECS221 Statics **ENR 2550** 3

ECS222 Dynamics **ENR 2560** 3

ECS325 Mechanics of Solids **ENR 2580** 4

ECS326 Engr. Materials, Prop. & Proc. 3

ELE231 Elec. Engr. Fundamentals 1 **ENR 2740** 3

ELE291 Elec. Engr. Laboratory 1 1

ELE312 Linear Control Systems 3

MECHANICAL ENGINEERING (40)

MAE184 Engr. Graphics & CAD 3

MAE251 Thermodynamics 4

MAE315 Mech/Aero Lab I 3

MAE321 Dynamics of Mech. Systems 3

MAE341 Fluid Mechanics 4

MAE355 Heat Transfer 4

MEE332 Intro. Mach. Des. & Mfg. 4

MEE416 Mechanical Engr. Lab 1

MEE471 Syn. Mech. Systems 1 3

MEE472 Syn. Mech. Systems 2 4

MFE 331 Manufacturing Processes 3

TOTAL CREDITS 58 17 17 17 17 17 13 13