October 2018

Dear First-Year Students:

On behalf of the students, faculty, and staff of the College of Engineering and Computer Science, I am delighted to have this opportunity to welcome you into our community. We are all looking forward to working alongside you to help make sure that your experience as an ECS student is both rewarding and successful.

The next several years will be a challenging and exciting time for you. As you embark on an ECS undergraduate program that will help prepare you to become a future leader in engineering and computer science, you can look forward to receiving the enthusiastic support of faculty and staff who are firmly committed to your success.

Your success as an ECS student will be based, in part, upon the choices that you make over the course of the next several years. With that in mind, we have assembled this handbook for your use. Please think of this handbook as a resource guide that is available to you and your faculty advisor as you meet to discuss your academic goals and plans.

Inside this handbook, you will find information on rules, regulations, procedures, and worksheets that relate to your program of study. These materials will help you to keep track of your academic progress and will also provide you with important guidelines for registration, advising, and program-of-study adjustments. You will find that sections of this handbook refer you to a separate document, *The University Bulletin: Academic Rules and Regulations*, which is available online.

Perhaps the most important and valuable resource that is available to you is the assistance and support that you find from your advisor and from the staff members of your department and the ECS Student Records Office. Our door is always open to your thoughts, ideas, concerns, and accomplishments - please feel free to share them with us at any time. For your information, our office is located at 130 Link Hall; telephone number 315-443-5191.

We all wish you the very best for continued success, good health, and happiness.

Warm regards,

Dr. Julie Hasenwinkel
Senior Associate Dean
# Table of Contents

**directories**

- ECS Student Services Directory ................................................................. 9
- Academic Programs Directory ................................................................. 10
  - Department Chairs .............................................................................. 10
  - Program Directors ............................................................................. 10
  - Research Centers .............................................................................. 10
- Computer & Information Technology Services ........................................... 11
- Academic Calendar 2018-2019 ................................................................. 12
- Academic Integrity .................................................................................. 14

**First-Year Programs and Student Success Programs** ............................. 15
  - Academic Excellence Workshop (AEW) .................................................. 15
  - SSC Peer Leaders ................................................................................ 15
  - Success Advisors ................................................................................ 16
  - Professional Engineering Societies ......................................................... 16
  - Study Groups & Tutoring Services ......................................................... 16
- Student Career Opportunities .................................................................... 17
  - Cooperative Education Program ........................................................... 17
- Study Abroad Program ............................................................................ 18
- WiSE ........................................................................................................ 19
- Syracuse University Statement on Academic Advising ........................ 20
  - Academic Advising ............................................................................ 20
- Academic Policies and Procedures .......................................................... 21
  - Academic Probation and Suspension Policy ........................................... 21
  - Advising ................................................................................................. 23
- Advanced Credit Examinations ............................................................... 23
- Advanced Placement Examinations ......................................................... 23
- Auditing Courses .................................................................................... 24
- Change of Major .................................................................................... 24
- Corrected Grades .................................................................................... 24
- Dean’s List ............................................................................................. 25
- Flagging Courses .................................................................................... 25
- Graduate Level Courses ......................................................................... 25
Graduation Honors........................................................................................................................... 26
Incompletes........................................................................................................................................ 26
Independent Study............................................................................................................................... 26
Intra-University Transfer (IUT).......................................................................................................... 27
Leave Of Absence and Withdrawal.................................................................................................... 28
Missing Grades .................................................................................................................................. 28
Pass/Fail Option ............................................................................................................................... 28
Petitions ............................................................................................................................................. 28
Readmission/Termination of Leave of Absence.................................................................................. 29
Registration....................................................................................................................................... 29
Repeating a Course ............................................................................................................................. 29
New York State TAP Recipients ........................................................................................................ 30
Registration for More Then 19 Credit Hours (overload) ..................................................................... 30
Schedule Adjustment ......................................................................................................................... 30
  Adding Courses during the first week of classes ............................................................................ 30
  Dropping a Course after the first week of classes ......................................................................... 31
Summer Courses ............................................................................................................................... 32
Withdrawal from a Course ................................................................................................................... 32
All University Requirements ............................................................................................................... 33
  English Courses for Foreign Students ............................................................................................ 33
  Writing Courses ............................................................................................................................. 33
All-College Requirements .................................................................................................................. 33
  Introduction to Engineering and Computer Science ........................................................................ 33
  Free Electives ................................................................................................................................. 33
  Mathematics .................................................................................................................................. 33
  Natural Sciences ............................................................................................................................ 33
  Physical Education Courses (PED) ................................................................................................ 34
  Remedial Courses .......................................................................................................................... 34
  ROTC Courses ............................................................................................................................. 34
Senior Year ....................................................................................................................................... 34
  File Diploma Request .................................................................................................................... 34
  Diplomas & Status Verification ....................................................................................................... 35
  Graduation ..................................................................................................................................... 35
  Professional Engineer Exam .......................................................................................................... 35
## DIRECTORIES

### ECS Student Services Directory

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Office Location</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dean’s Office Suite</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interim Dean of Engineering &amp; Computer Science</td>
<td>Can Isik</td>
<td>223 Link Hall</td>
<td>315-443-4341</td>
</tr>
<tr>
<td>Assistant to the Dean</td>
<td>Stephanie Vasta</td>
<td>223 Link Hall</td>
<td>315-443-4341</td>
</tr>
<tr>
<td>Senior Associate Dean</td>
<td>Dr. Julie Hasenwinkel</td>
<td>223 Link Hall</td>
<td>315-443-4345</td>
</tr>
<tr>
<td>Assistant to the Senior Associate Dean &amp; Space Management</td>
<td>Lynore de la Rosa</td>
<td>223 Link Hall</td>
<td>315-443-4345</td>
</tr>
<tr>
<td>Associate Dean for Academic Administration &amp; Space Management</td>
<td>Dr. Riyad Aboutaha</td>
<td>223 Link Hall</td>
<td>315-443-3604</td>
</tr>
<tr>
<td>Assistant to the Associate Dean</td>
<td>Susan Karlik</td>
<td>223 Link Hall</td>
<td>315-443-3604</td>
</tr>
<tr>
<td>Director Computer &amp; IT Services (<a href="mailto:help@ecs.syr.edu">help@ecs.syr.edu</a>)</td>
<td>Jim Spoelstra</td>
<td>210 Link Hall</td>
<td>315-443-1227</td>
</tr>
<tr>
<td>Fax Number</td>
<td>Dean’s Office</td>
<td>223 Link Hall</td>
<td>315-443-4936</td>
</tr>
<tr>
<td><strong>ECS Student Records Office</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director of Student Records &amp; Study Abroad</td>
<td>Maria Marceau</td>
<td>129 Link Hall</td>
<td>315-443-5191</td>
</tr>
<tr>
<td>Assistant to the Director</td>
<td>Nicole Adkins</td>
<td>130 Link Hall</td>
<td>315-443-5191</td>
</tr>
<tr>
<td>Fax Number</td>
<td>Student Records Office</td>
<td>130 Link Hall</td>
<td>315-443-4459</td>
</tr>
<tr>
<td><strong>Student Success Center</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director Student Programs</td>
<td>Kathryn Pynn</td>
<td>121 Link Hall</td>
<td>315-443-2582</td>
</tr>
<tr>
<td>Director Student Success Advising</td>
<td>Sarah Mack</td>
<td>121 Link Hall</td>
<td>315-443-3513</td>
</tr>
<tr>
<td>Success Advisor</td>
<td>Anna Kramer</td>
<td>121 Link Hall</td>
<td>315-443-2582</td>
</tr>
<tr>
<td>Success Advisor</td>
<td>Malea Perkins</td>
<td>121 Link Hall</td>
<td>315-443-3978</td>
</tr>
<tr>
<td>Success Advisor</td>
<td>Derek Pooley</td>
<td>115 Link Hall</td>
<td>315-443-1373</td>
</tr>
<tr>
<td>Interim Director for Career Services</td>
<td>Mary Kay Montville</td>
<td>121 Link Hall</td>
<td>315-443-2371</td>
</tr>
<tr>
<td>Career Advisor</td>
<td>Christopher Maldonado</td>
<td>133 Link Hall</td>
<td>315-443-4531</td>
</tr>
<tr>
<td>Career Advisor</td>
<td>Anand Samuel</td>
<td>135 Link Hall</td>
<td>315-443-4149</td>
</tr>
<tr>
<td>Career Advisor</td>
<td>LeAnne Shaler</td>
<td>125 Link Hall</td>
<td>315-443-3839</td>
</tr>
<tr>
<td>Fax Number</td>
<td>Student Success Center</td>
<td>121 Link Hall</td>
<td>315-443-1065</td>
</tr>
<tr>
<td><strong>Office of Inclusive Excellence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interim Assistant Dean for Inclusive Excellence</td>
<td>Karen Davis</td>
<td>121 Link Hall</td>
<td>315-443-2582</td>
</tr>
<tr>
<td><strong>ECS Admissions Office</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant Dean for Student Recruitment</td>
<td>Kathleen Joyce</td>
<td>123 Link Hall</td>
<td>315-443-1044</td>
</tr>
<tr>
<td>Undergraduate Recruitment Specialist</td>
<td>Jonathan Hoster</td>
<td>123 Link Hall</td>
<td>315-443-1044</td>
</tr>
</tbody>
</table>


# Academic Programs Directory

## Department Chairs

<table>
<thead>
<tr>
<th>Department</th>
<th>Chair Name</th>
<th>Office Location</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical &amp; Chemical Engineering</td>
<td>Dr. Radhakrishna Sureshkumar</td>
<td>329 Link Hall</td>
<td>315-443-1931</td>
</tr>
<tr>
<td>Civil &amp; Environmental Engineering</td>
<td>Dr. Andria Costello Staniec</td>
<td>151 Link Hall</td>
<td>315-443-2311</td>
</tr>
<tr>
<td>Electrical Engineering &amp; Computer Science</td>
<td>Dr. Jae Oh</td>
<td>4-206 Sci Tech</td>
<td>315-443-2562</td>
</tr>
<tr>
<td>Mechanical &amp; Aerospace Engineering</td>
<td>Dr. Young Moon</td>
<td>263 Link Hall</td>
<td>315-443-2341</td>
</tr>
</tbody>
</table>

## Program Directors

<table>
<thead>
<tr>
<th>Department</th>
<th>Program Directors</th>
<th>Office Location</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engineering</td>
<td>Dr. John Dannenhoffer</td>
<td>263 Link Hall</td>
<td>315-443-2341</td>
</tr>
<tr>
<td>Bioengineering</td>
<td>Dr. Pun To (Doug) Yung</td>
<td>329 Link Hall</td>
<td>315-443-1931</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>Dr. Katie Cadwell</td>
<td>329 Link Hall</td>
<td>315-443-1931</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Prof. Joan Dannenhoffer, Program Coordinator</td>
<td>151 Link Hall</td>
<td>315-443-2311</td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>Dr. Jennifer Graham</td>
<td>4-206 Sci Tech</td>
<td>315-443-2562</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Dr. Susan Older</td>
<td>4-206 Sci Tech</td>
<td>315-443-2562</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>Dr. Jennifer Graham</td>
<td>4-206 Sci Tech</td>
<td>315-443-2562</td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td>Dr. Cliff Davidson</td>
<td>151 Link Hall</td>
<td>315-443-2311</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>Dr. Michelle Blum</td>
<td>263 Link Hall</td>
<td>315-443-2311</td>
</tr>
<tr>
<td>Systems &amp; Information Science</td>
<td>Dr. Andrew Lee</td>
<td>4-206 Sci Tech</td>
<td>315-443-2562</td>
</tr>
</tbody>
</table>

## Research Centers

<table>
<thead>
<tr>
<th>Center Name</th>
<th>Office Location</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syracuse Biomaterials Institute</td>
<td>318 Bowne Hall</td>
<td>315-443-9185</td>
</tr>
<tr>
<td>The Center for Advanced Systems and Engineering (CASE)</td>
<td>2-212 Sci Tech</td>
<td>315-443-1060</td>
</tr>
<tr>
<td>Green Data Center</td>
<td>263 Link Hall</td>
<td>315-443-2341</td>
</tr>
<tr>
<td>Syracuse Center of Excellence (COE) in Environmental Energy Systems</td>
<td>727 E. Washington Street</td>
<td>315-443-4445</td>
</tr>
</tbody>
</table>
Computer & Information Technology Services

The College of Engineering & Computer Science (ECS) provides an extensive list of computing resources for its students. There are ECS customized PCs in numerous faculty labs and in several public labs. In addition to the standard office productivity tools like word processors and spreadsheet programs, there are a broad range of the latest engineering tools (CAD, CAE, FEA, math and simulation) and software development tools. A full list of available software at ECS can be found at http://helpdesk.ecs.syr.edu. Also note software that is available for students to download at little or no cost. The ECS Windows computing labs use the campus NetID and password and all students have a home directory quota of 100GB. All PCs have DVD Optical Drives and USB ports for portable storage. They are located as follows:

- Link 011 (“MADlab”) - 30 PCs
- Link 201-18 PCs - Open lab for student use only - no classes scheduled
- Link 202 - 33 PCs
- Link 274 - 35 PCs
- CST 3-116 - 40 PCs
- CST 3-231 - 35 MACs

Computer lab schedules and computer availability are located at http://helpdesk.ecs.syr.edu.

Some ECS Software is also available through Remote Access. Please see http://helpdesk.ecs.syr.edu for instructions.

All ECS students who need Linux access:

- Use Xshell or any SSH terminal emulator to connect to ecs-linux.syr.edu
- Use your Net ID and password to login

Please visit the Online Services at http://listserv.syr.edu and review your ListServ subscriptions by using the "Subscriber’s Corner". It is to your advantage to be subscribed to your class list, so please ensure that you are.

<table>
<thead>
<tr>
<th>All ECS Graduates</th>
<th><a href="mailto:ECS-grad@listserv.syr.edu">ECS-grad@listserv.syr.edu</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>All ECS First Year</td>
<td><a href="mailto:ECS-2022@listserv.syr.edu">ECS-2022@listserv.syr.edu</a></td>
</tr>
<tr>
<td>All ECS Sophomores</td>
<td><a href="mailto:ECS-2021@listserv.syr.edu">ECS-2021@listserv.syr.edu</a></td>
</tr>
<tr>
<td>All ECS Juniors</td>
<td><a href="mailto:ECS-2020@listserv.syr.edu">ECS-2020@listserv.syr.edu</a></td>
</tr>
<tr>
<td>All ECS Seniors</td>
<td><a href="mailto:ECS-2019@listserv.syr.edu">ECS-2019@listserv.syr.edu</a></td>
</tr>
</tbody>
</table>

***NOTE**: Subscribing to any of the class lists automatically subscribes you to ECS UNDERGRAD and ECS-STUDENTS where appropriate. You only need to subscribe to your class’ mailing list.

For other information about ECS computing, please visit http://helpdesk.lcs.syr.edu. Email questions and requests can be sent help@ecs.syr.edu or by visiting the CIT Help Desk in 204 Link Hall during business hours.
<table>
<thead>
<tr>
<th>Academic Deadline or Event</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration for new graduate students</td>
<td>Wednesday, August 1</td>
</tr>
<tr>
<td>Schedule adjustment for returning undergraduate students</td>
<td>Monday August 13 - Friday August 17</td>
</tr>
<tr>
<td>Registration for new and readmitted undergraduate students</td>
<td>Saturday, August 25 &amp; Sunday, August 26</td>
</tr>
<tr>
<td>First day of classes/Extended Campus Classes</td>
<td>Monday, August 27</td>
</tr>
<tr>
<td>Late registration &amp; Schedule adjustment</td>
<td>Monday, August 27 - Tuesday, September 4</td>
</tr>
<tr>
<td>Labor Day (no classes, University offices closed)</td>
<td>Monday, September 3</td>
</tr>
<tr>
<td>Add deadline*</td>
<td>Tuesday, September 4</td>
</tr>
<tr>
<td>Early-semester progress report</td>
<td>Monday, September 10 - Friday, September 14</td>
</tr>
<tr>
<td>Grading option deadline to elect or rescind pass/fail or audit</td>
<td>Monday, September 10</td>
</tr>
<tr>
<td>Academic/Financial deadline to drop class*</td>
<td>Monday, September 17</td>
</tr>
<tr>
<td>Mid-semester progress report</td>
<td>Thursday, October 11 - Sunday, October 21</td>
</tr>
<tr>
<td>Midterm</td>
<td>Monday, October 15</td>
</tr>
<tr>
<td>Registration for Spring 2019</td>
<td>Wednesday, November 7 - Tuesday, January 22</td>
</tr>
<tr>
<td>Registration for Winterlude begins</td>
<td>Wednesday, November 7</td>
</tr>
<tr>
<td>Withdrawal deadline*</td>
<td>Friday, November 16</td>
</tr>
<tr>
<td>Thanksgiving Break (no classes, University offices open Mon. through Wed.)</td>
<td>Sunday, November 18 - Sunday, November 25</td>
</tr>
<tr>
<td>Last day of classes</td>
<td>Friday, December 7</td>
</tr>
<tr>
<td>Reading days</td>
<td>Saturday, December 8, Sunday, December 9; Tuesday, December 11 and Thursday, December 13 (am only)</td>
</tr>
<tr>
<td>Final examinations</td>
<td>Monday, December 10; Wednesday, December 12; Friday, December 14; Tuesday, December 11 and Thursday, December 13 (pm only)</td>
</tr>
<tr>
<td>Last day of Extended Campus classes</td>
<td>Thursday, December 13</td>
</tr>
<tr>
<td>Last day of the semester</td>
<td>Friday, December 14</td>
</tr>
<tr>
<td>Winterlude begins</td>
<td>Monday, December 17</td>
</tr>
<tr>
<td>Winterlude add deadline</td>
<td>Tuesday, December 18</td>
</tr>
<tr>
<td>Final grades due from faculty</td>
<td>Thursday, December 27</td>
</tr>
<tr>
<td>Winterlude Academic/Financial drop deadline</td>
<td>Friday, December 21</td>
</tr>
<tr>
<td>Degree Award Date</td>
<td>Friday, December 21</td>
</tr>
</tbody>
</table>

**SPRING 2019**

<table>
<thead>
<tr>
<th>Academic Deadline or Event</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration for new graduate students</td>
<td>Wednesday, January 2</td>
</tr>
<tr>
<td>Winterlude withdrawal deadline</td>
<td>Monday, January 7</td>
</tr>
<tr>
<td>Winterlude ends</td>
<td>Friday, January 11</td>
</tr>
<tr>
<td>Registration for new/returning graduate students who did not previously register, and new/ readmitted undergraduate students</td>
<td>Saturday, January 12</td>
</tr>
<tr>
<td>First day of classes/Extended Campus Classes</td>
<td>Monday, January 14</td>
</tr>
<tr>
<td>Late registration &amp; Schedule adjustment</td>
<td>Monday, January 14 - Tuesday, January 22</td>
</tr>
<tr>
<td>Martin Luther King Jr. Day (no classes, University offices closed)</td>
<td>Monday, January 21</td>
</tr>
<tr>
<td>Add deadline*</td>
<td>Tuesday, January 22</td>
</tr>
<tr>
<td>Early-semester progress report</td>
<td>Monday, January 28 - Friday, February 1</td>
</tr>
<tr>
<td>Grading option deadline to elect or rescind pass/fail or audit</td>
<td>Monday, January 28</td>
</tr>
<tr>
<td>Academic/Financial deadline to drop class*</td>
<td>Monday, February 4</td>
</tr>
<tr>
<td>Midterm</td>
<td>Tuesday, March 5</td>
</tr>
<tr>
<td>Mid-semester progress report</td>
<td>Wednesday, March 6 - Wednesday, March 20</td>
</tr>
<tr>
<td>Spring Break (no classes, University offices open)</td>
<td>Sunday, March 10 - Sunday, March 17</td>
</tr>
<tr>
<td>Registration for Summer 2019</td>
<td>Wednesday, March 20</td>
</tr>
<tr>
<td>Registration for Fall 2019</td>
<td>Monday, April 8 - Wednesday, May 8</td>
</tr>
<tr>
<td>Academic Deadline or Event</td>
<td>Dates</td>
</tr>
<tr>
<td>----------------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Maymester</td>
<td>Monday, May 13 - Friday, May 24</td>
</tr>
<tr>
<td>Summer Session I</td>
<td>Monday, May 20 - Friday, June 28</td>
</tr>
<tr>
<td>Combined Summer Session</td>
<td>Monday, May 20 - Friday, August 9</td>
</tr>
<tr>
<td>Memorial Day (no classes, University offices closed)</td>
<td>Monday, May 27</td>
</tr>
<tr>
<td>Mid-semester progress report Summer Session I</td>
<td>Friday, June 7 - Wednesday, June 12</td>
</tr>
<tr>
<td>Degree Award Date</td>
<td>Friday, June 28</td>
</tr>
<tr>
<td>Mid-semester progress report Combined Summer Session</td>
<td>Friday, June 28 - Friday, July 5</td>
</tr>
<tr>
<td>Summer Session II</td>
<td>Monday, July 1 - Friday, August 9</td>
</tr>
<tr>
<td>Independence Day (no classes, University offices closed)</td>
<td>Thursday, July 4</td>
</tr>
<tr>
<td>Mid-semester progress report Summer Session II</td>
<td>Friday, July 19 - Wednesday, July 24</td>
</tr>
<tr>
<td>Degree Award Date</td>
<td>Friday, August 23</td>
</tr>
</tbody>
</table>

All dates may be subject to change at the discretion of the University.

August 2018
Academic Integrity

I. General Policy Statement
Syracuse University aspires to the highest standards of integrity and honesty in all endeavors. The Academic Integrity Policy is designed to make integrity and honesty central to the Syracuse University experience by: setting forth clear ethical expectations for students in their academic endeavors; promoting consistency of standards and practices across colleges, schools and programs; encouraging reporting of suspected violations; and facilitating the resolution of cases as promptly as possible while providing thorough and fair consideration for students and instructors. Education is a central goal of the policy, including affording students an opportunity to discuss and learn from academic integrity violations.

II. Reason for Policy/Purpose
Academic integrity furthers the central mission of the University: to foster high-quality learning, teaching and research, endeavors that are premised on individual intellectual and creative work and require a commitment to the values of honesty, trustworthiness, fairness, respect and responsibility. These values are essential to the overall success of any academic institution, including Syracuse University.

This policy is designed to cultivate an academic environment of honesty and integrity by ensuring that students adhere to certain ethical standards in their academic work. This policy addresses academic integrity standards that apply to students, and it governs the ways in which faculty, instructors and administrators must handle suspected violations.¹

Syracuse University first adopted a university-wide academic integrity policy in 2006 following passage of a University Senate motion of support for this framework. As part of this framework, the University created the Academic Integrity Office (AIO) to work with the Schools and Colleges in implementing the policy; charged the Senate Committee on Instruction with periodic review of the policy and recommendations for revision when warranted by AIO assessment reports and input from the University community; and made revision of the policies and procedures subject to approval by the Vice Chancellor and Provost. This policy supersedes all policies, procedures and written and online statements of Syracuse University with regard to academic integrity standards. Syracuse University retains the right to revise this policy from time to time based on assessment of its effectiveness and, with approval of the Vice Chancellor and Provost, to modify procedures on a temporary basis in order to pilot and evaluate them. The original university-wide policies and procedures were implemented in 2006 and revised in 2008 and 2011. The current policy is effective as of January 1, 2017.

Please see the website for the complete Academic Integrity Policy.
First-Year Programs and Student Success Programs

At Syracuse University’s College of Engineering and Computer Science (ECS), we are committed to the success of each individual. This commitment to student success is at the heart of ECS First-Year Programs and Student Success Programs. It is a commitment that is found not only in our classrooms, but also in the programs and experiences that we provide to our students. These opportunities support our students’ development in the academic, personal, and professional skills that are so critical for success and leadership in today’s society.

Academic Excellence Workshop (AEW)
The Academic Excellence Workshop (AEW) is an optional active-learning program offered to students taking Pre-Calculus, Calculus I, II, and III. It has also been expanded to several key engineering foundation courses and higher level mathematics courses.

AEW delivers a unique approach to calculus instruction by supplementing classroom teaching through a highly interactive, small-group session. Trained undergraduate facilitators, who excelled in the course previously, work with six to eight students who have volunteered for the extra time commitment week required by AEW. The facilitators present the AEW participants with a worksheet developed in conjunction with the course instructor that reinforces key principles recently taught in class. The facilitator is trained not to do the work for the students, but to encourage them to work in teams, using the language of the course to solve the problems.

The result is a lively, interactive session where students work together to solve problems that enhance their understanding of the subject material. The goal of AEW is to encourage subject mastery, and not merely memorization. At the same time, students develop strengths in other areas to, including their communication, teamwork, problem solving, and presentation skills.

SSC Peer Leaders
Students helping students. That is the goal of the Peer Leaders, a group of upperclassmen who assist first-year and transfer students in their transition to life as new members of the SU community. Peer Leaders offer guidance, support, and friendship to new students in the first semester and beyond.
**Success Advisors**
As part of our each student’s advising team, Success Advisors support students in reaching their personal, academic and professional goals. Your appointments with a Success Advisor are tailored to **YOU**: your interests, grades, goals, and talents. Whether you’re tackling current academic struggles or seeking ways to enhance your learning experiences, your Success Advisor will help you maximize your options. Success Advisors are here to help you make the most of your college experience. The Success Advisors offer both group and individual sessions on an array of topics, such as, how to improve academic performance through study habit development, better time management and improved organizational skills.

**Professional Engineering Societies**
**Student chapters of professional engineering societies** focus on student success by providing academic support to members, including tutoring, study circles, and mentoring.

Student societies also promote professional development by hosting guest speakers from industry, and by sponsoring visits to area companies. Other activities include participation in regional and national conferences and competitions where students enjoy additional opportunities to network with their peers from other schools and with professionals from industry. Students often join several societies to share common interests, network, and prepare for life beyond college.

Additional information on ECS Student Societies can be found at [http://studentactivities.syr.edu](http://studentactivities.syr.edu).

**Study Groups & Tutoring Services**
**Study Groups and Tutoring Services** are available to help students achieve academic excellence in ECS through study groups and tutoring for various courses. You can get current information about these groups in the Student Success Center in 121 Link Hall or by viewing the ECS Student Success Center Guide on the SU Guides app available at [http://guidebook.com](http://guidebook.com).

It is important for all ECS students to recognize that good study technique includes studying together. You master course content more thoroughly, with better retention when you explain it to others. Successful students not only join study groups, they start them. We encourage all ECS students to do both. It is one of our priorities to help students interested in forming study groups. If you would like some assistance, please stop by and let us know of your interest.

**For Additional Information Contact:**
Student Success Center
121 Link Hall
(315) 443-2582
ecsuccess@syr.edu
Student Career Opportunities

Cooperative Education Program
The ECS Cooperative Education program (Co-op) empowers undergraduate students to take advantage of experiential learning opportunities that have proven to aid them in successfully reaching their post graduate goals. The Co-op program consists of full-time professional work primarily during the summer. This design allows students the opportunity to gain more than six months of paid work experience in their field of study and still graduate in four years. Working during the academic year is an option that students may choose, with the understanding that their ability to graduate on time may be affected. To be eligible, students must be enrolled full time in the College of Engineering and Computer Science.

For Additional Co-Op Information Contact:
ECS Career Services Office
121 Link Hall
(315) 443-2371
Study Abroad Program

In a time of rapidly growing global complexity and opportunity, international study is an increasingly important and relevant component of undergraduate study, especially for students preparing for careers in engineering or computer science. Of all the major professions, engineering and computer science are the most likely to involve international activity. In addition to strong technical skills, employers are increasingly looking for international experience, cross-cultural skills by developing a “global mindset” and perspectives, and an understanding of the world’s diversity.

For over 20 years, the College, in a partnership with SU Abroad, has been a national leader in providing distinctive international study opportunities. These opportunities include:

- Study at SU Centers during Fall or Spring Semesters at: Florence, Hong Kong, Istanbul, London, Madrid, Santiago, and Strasbourg
- Study at World Partner Programs at affiliated universities at: Dublin, Hong Kong, Istanbul, and Sydney
- Summer Research program in Strasbourg, France

The College of Engineering and Computer Science’s international study programs give students the opportunity to gain global experience, develop new ways of viewing the world, form lasting friendships abroad, and deepen their connection to other countries, languages and cultures. Students with these experiences gain a competitive edge in today’s multinational, multicultural environment.

To participate, students must be in good academic standing with a cumulative GPA of 3.0 and in one of Syracuse University’s engineering, computer science or systems & information science programs or in an equivalent program elsewhere. Participants must also meet any language requirements of the host country.

Important Application Deadlines
- Spring semester: October 15th
- Summer semester: February 20th
- Fall semester: February 20th

For further information, contact the College of Engineering and Computer Science Study Abroad Office in 130 Link Hall or Syracuse University Abroad or, SU Abroad office at 106 Walnut Place (suabroad.syr.edu).

For Additional Information Contact:
Maria Marceau
Director
129 Link Hall
Syracuse, NY 13244
(315) 443-5191
mcmarce@syr.edu
WiSE
Women in Science and Engineering at Syracuse University

The WiSE program fosters current and future success of women in science, technology, engineering, and mathematics (STEM) through programs designed to address their unique strengths and challenges at every stage from entering freshman to accomplished professional.

Student and faculty involvement and commitment make WiSE one of the most successful women’s programs at Syracuse University.

Key Goals of WiSE
• Positively impact persistence in STEM for undergraduate women through an emphasis on research.
• Support professional development, degree completion and/or career preparation for women graduate students and post-doctoral fellows.
• Increase resilience, support advancement and improve career and personal productivity and balance for women STEM faculty.
• Build a strong community and social network for women in STEM.

For Additional Information Contact:
Sharon Alestalo
WiSE Program Manager
335 Link Hall
(315) 443-3419
swalesta@syr.edu
www.suwise.syr.edu

Stephanie Wyatt
WiSE Program Assistant
267/269a Link Hall
(315) 443-2313
smwyatt@syr.edu
Syracuse University Statement on Academic Advising

**Academic Advising**

Academic advising is an essential component of a Syracuse University education. The University is committed to providing the individual advice and assistance that students need at every step throughout their degree programs. A successful system of academic advising is highly dependent upon a shared commitment of students, faculty, and staff to process and availability of timely, accurate information.

**Students** are responsible for scheduling, preparing for, and keeping advising appointments; for seeking out contacts and information; and for knowing the basic requirements of their individual degree programs. Students bear the final responsibility for making their own decisions based on the best information and advice available and, ultimately, on their own judgment.

**Advisors** are responsible for developing a thorough knowledge of the degree requirements within the student's program of study and a working knowledge of academic options and resources throughout the University. Advisors are expected to involve students by encouraging them to ask questions, gather information, and explore options so that they may develop a meaningful academic plan.

**Orange SUccess**, Orange SUccess is a web-based advising tool that provides comprehensive support for students at all the schools and colleges of Syracuse University. This system will connect you to faculty and staff to help you have a successful academic career at Syracuse University.

To get started, set up your student profile. Orange SUccess can be accessed through MySlice and Blackboard. Find and click the link “Ask for Help in Orange SUccess” in the “Student Services” pagelet of MySlice or the “tools” panel of Blackboard. For more information, visit [http://orangesuccess.syr.edu](http://orangesuccess.syr.edu).
Academic Policies and Procedures

Academic Probation and Suspension Policy
Students are placed on academic probation when their academic records fail to meet specific **minimum criteria for progress** toward degree completion.

1) Term or cumulative GPA less than 2.0 and Less than 2.0 Mathematics, Science and ECS course GPA (IST courses for SIS majors)
2) Completion of less than 12 credits hours in one semester or 24 credits hours within any 12-month period
3) Failure to complete at least 6 credits and/or term GPA less than 1.5, will result in immediate suspension
4) Failure to complete calculus sequence by the end of the sophomore year (MAT 295, 296, & 397) (Does not apply to SIS majors)
5) In addition to the above conditions, computer science students only: GPA of less than 2.667 in core courses
6) Failure to maintain satisfactory progress toward your degree
7) Failure to meet special conditions of previous semester

Students may be suspended from the College of Engineering and Computer Science if they do not achieve the minimum GPA.

**HOURS COMPLETED** refers to credit hours toward the degree program and includes all transfer credits. **Minimum GPA** refers to the cumulative grade point average for courses taken at Syracuse University. Students classified as Juniors or Seniors (60 credit hours or more) must have at least a 2.00 cumulative average, whether or not they are transfer students.

For **GRADUATION**, students must have at least a 2.00 cumulative GPA and at least a 2.00 GPA in all ECS, mathematics, and science course taken at Syracuse University. In addition, students must meet all degree requirements specific to the chosen major.

Students are placed on academic probation when their academic records fail to meet specific minimum criteria for progress toward degree completion. Probationary status is determined by the Senior Associate Dean in consultation with program directors. The classifications of probation are listed on the next page.
Probationary status is indicated on the student’s record maintained in the Student Records Office. The following are the various levels of probation status:

<table>
<thead>
<tr>
<th>STATUS AT BEGINNING OF SEMESTER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>College Probation (COP)</strong></td>
</tr>
<tr>
<td>• Violation of one or more of the above criteria</td>
</tr>
<tr>
<td>• A service Indicator of (ECP) was added to your record on MySlice and will be removed at the end of the semester after you meet the special conditions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Probation - One Semester Trial (PST)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Term GPA less than 1.75</td>
</tr>
<tr>
<td>• Violation of 3 or more of the above criteria</td>
</tr>
<tr>
<td>• A service Indicator of (ECT) was added to your record on MySlice and will be removed at the end of the semester after you meet the special conditions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Academic Suspension</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ineligible to Register (IRE)</td>
</tr>
<tr>
<td>• Failure to complete at least 6 credits and/or term GPA less than 1.5, will result in immediate suspension</td>
</tr>
<tr>
<td>• No improvement while on PST</td>
</tr>
</tbody>
</table>

**Probation with Advice to Withdraw**

Students are placed on Probation with Advice to Withdraw (PAW-ECW) because they are not following an ECS program of study and are taking courses that will enable them to transfer to another school/college at SU. These students must make significant progress toward achieving the desired “Intra-University Transfer (IUT)” guidelines, or they will be suspended. A service Indicator of (EWC) was added to your record on MySlice and will be removed at the end of the semester after you meet the special conditions.

Students on PAW may not return to ECS unless exceptional circumstances have been met and approved by the Senior Associate Dean.

Please see the course catalog, academic rules and regulations for other school/college IUT requirements:
**Advising**

All Engineering and Computer Science students are assigned faculty advisors. The advisor signs all academic forms (add/drops, petitions). Each semester, prior to registration, students meet with their advisors to discuss the upcoming semester and to prepare for registration. It is important to plan carefully for this meeting to be sure that you will be taking the appropriate courses. You should also feel free to meet regularly with your advisor during the term to discuss program plans for the next term as well as any problems or concerns you may have.

Please feel free to let your advisor know about the good things that are happening to you (scholarships, awards, activities). The more an advisor knows about you, the better equipped they will be able to advise and to make suggestions and recommendations.

Faculty advisor assignments may be changed for the following reasons:

1. **Student Request** - A student who prefers another advisor should see the Student Records Office in 130 Link Hall.
2. **Student Change of Major** - A student who changes his/her major will have a professional faculty advisor from the new academic unit assigned to them.
3. **Advisor Department** - When faculty advisors leave their academic units or the University, their advisees are reassigned to another advisor in the same program. The new advisor will advise these students until they complete their degree requirements.
4. **Advisor on Leave of Absence** - If faculty advisors are unable to meet with their advisees during registration or during the academic year, their students are assigned temporary advisors. This is not a permanent assignment; when regular advisors return they will resume their advising duties.

**Advanced Credit Examinations**

Matriculated Syracuse University students may earn credit in an SU course by taking an Advanced Credit Examination. The examination must be approved by the department chair concerned, the student’s advisor, and the Senior Associate Dean. It is administered and graded by a member of the faculty. Only A, B, and C grades are acceptable as passing grades. Both credits and grade points are recorded on the student’s transcript. By University policy, this option may not be used to repeat a course and flag the first course grade.

For more information, including examination fees, refer to the General Academic Rules and Regulations and to the booklet on Tuition, Fees and Related Policies.

**Advanced Placement Examinations**

Syracuse University is authorized to award academic credit to students who have successfully passed examinations administered by Advanced Placement Program of the College Entrance Examination Board (CEEB). Scores from these examinations must be sent from the agency administering the examination directly to the College. Since the award of credit for AP courses depends on academic major, students should contact their academic advisors or the Student Records Office (130 Link Hall) for additional information.
Academic credit for AP examinations is indicated in the student’s record. Advanced Placement Examinations are scored 1 through 5. These credits count just as if the student has taken the corresponding course while in college although no grades are assigned. The credits are counted toward the total required for the degree.

**Please see page 38 for the AP Table.**

**Auditing Courses**
Students may audit courses with the approval of the appropriate department and subject to the restrictions made by the instructor.

Students auditing courses may not be responsible for fulfilling the academic requirements of the course and, therefore, do not receive academic credit for auditing courses. Audited courses appear on student transcripts with a grade of AU, which means no academic credit was earned. Audited courses do not affect the calculation of the grade point average, nor do they count toward hours for graduation. Tuition charges for audited courses are published annually by the Bursar’s Office in the booklet.

Students must decide by the end of the second week of classes whether or not they wish to audit a course. They may not rescind their selection of the audit option after the first two weeks of classes. Students may drop or withdraw from an audited course in accordance with standard procedures. See the Student Records Office in 130 Link Hall if you need assistance.

**Change of Major**
In order to select or change a major, students must obtain a formal approval from the department chair or program director of the new major. Students may do this by obtaining a Change of Major Petition in the Student Records Office or the ECS website, and following the procedure below:

1. Meet with Chairperson or Program Director of the new major.
2. Complete a Change of Major Petition Form clearly stating the current Major and the new major.
3. Obtain the signature of the Chairperson or the Program Director of the new major. A review of the student’s file may be necessary before making a decision. If the petition is approved, the Chairperson will assign a new faculty advisor to the student.

**Corrected Grades**
An instructor may elect to submit a grade change after the grade has already been reported. Grade changes must be submitted to the department chair, the dean of the student’s home school/college, and the Office of the Registrar. Any or all of those offices may require an explanation of the change, and may require that additional information or forms be provided. All changes involving grading symbols must adhere to University policies and procedures. The Office of the Registrar has final authority to approve changes that involve grading symbols. After a degree has been certified, a grade change may be recorded only if the student’s home school/college determines that the student has completed all coursework, and only the evaluation and grade change submission occurred after that date. Recording of a grade change after a degree has been certified is subject
to the approval of the University Registrar. **UNDER NO CIRCUMSTANCES MAY A STUDENT HAND-CARRY A CHANGE OF GRADE FORM**

Grades may also be changed in the following circumstances:

*HEOP or SSSP students* who receive grades of D or F during the Summer Start program will have these grades recorded as WD on the transcript; by petition a grade of C- may be changed to a WD.

**Dean’s List**
The minimum semester grade point average for the Dean’s list is 3.40. Students earning Dean’s List standing are notified each semester by a congratulatory notice from the Dean’s Office; the name will be posted in their hometown local newspaper and will be posted online. The Dean’s List will be generated one week after semester grades are posted on Myslice. To be eligible for Dean’s List recognition, the students must have earned a minimum of 12 graded credits and must have no missing or incomplete grades.

**Flagging Courses**
Students who transfer into the College of Engineering and Computer Science and who have accumulated courses that cannot be included in the new program of study may petition to have these courses flagged for exclusion from the calculation of the grade point average (GPA) following admission to the College. The flagged courses and grades are not deleted from the transcript. Students should be aware such action could affect their eligibility for TAP awards. The consequences with regard to TAP eligibility could be positive or negative. Students are advised to consult with a financial aid counselor BEFORE initiating the action of flagging courses.

Any course with a D or F may be retaken. A course may be flagged up to two times: the higher of the two (or three) grades will be counted in the GPA. For courses retaken more than once, the lower grade may be flagged by petition.

**Graduate Level Courses**
ECS students may register for graduate level courses (600 level) under the following conditions:

1. A senior whose overall academic record normally would qualify him or her for admission to the Graduate School may enroll in a 600-level course for undergraduate credit by petition and must have the approval of:

   *Instructor, Department Chairperson and Senior Associate Dean*

2. Graduating seniors who anticipate enrolling in the Graduate School of Syracuse University may submit a petition to the Graduate School to request graduate credit. Courses taken for graduate credit may not be applied toward an undergraduate degree.
Graduation Honors
Graduation honors are based on the following cumulative grade point averages:
Cum Laude..........................3.400
Magna Cum Laude.............3.600
Summa Cum Laude..........3.800

Students must complete at least 60 credit hours at Syracuse University in order to be eligible for graduation honors.

Incompletes
The symbol of I (Incomplete) may be granted to a student only if it can be demonstrated that it would be unfair to hold the student to the normal time limits of the course. Illness or other exceptional circumstances are the usual basis for consideration. To receive an Incomplete, a student must complete a Request for Incomplete Form, available in the Student Records Office. The form becomes a contract between the student and the course instructor, specifying the reasons for granting the Incomplete and the conditions and time limit for removing it.

An Incomplete grade is calculated as an F in the grade point average immediately. A student may graduate with Incompletes outstanding provided the cumulative average equals or exceeds 2.0 and the number of earned credits meets the requirements for the degree. This decision should be made with great care; once a student has graduated, s/he can not remove the Incomplete from her/his transcript. It remains a part of the permanent record.

Incompletes are not removed by re-registering for the course. Even though an instructor may require a student to repeat certain elements of a course to remove an Incomplete, the student should not register for the course a second time.

Further information concerning the removal of an incomplete can be found in the Academic Rules and Regulations, in the Undergraduate course catalog.

Independent Study
Students who wish to explore a special problem or study an area in which a formal course does not exist must submit a plan of study using the Proposal for Independent Study Form. The plan must be approved by the supervising instructor or faculty sponsor, the student's faculty advisor, the course department chair, and the Senior Associate Dean for Academic Programs. The form must be submitted to the Registrar’s Office in 106 Steele Hall. Students should check carefully with their faculty advisors and with the Senior Associate Dean prior to registering for an Independent Study to be sure that the course will be accepted toward the completion of requirements for a degree.
Intra-University Transfer (IUT)

1) Transfer In to the College of Engineering and Computer Science. (IUT-IN)

Students who wish to transfer to any program within the College of Engineering and Computer Science should have a strong record of achievement and demonstrated success in key technical courses. Specifically, it is critical for the applicant to excel in following and meet GPA requirements:

- Complete at least one of MAT 295, 296 or 397 with a grade of B- or better
- Complete at least one set of PHY 211/221 or CHE 150/151 with a grade of B- or better
- A minimum 3.0 cumulative grade point average

2) Transfer into Computer Science (CIS) programs only:

Students who wish to major in CIS must also complete the following:
- CIS 252 with a grade of at least a B (3.0), along with the above requirements

Obtain an Intra-University Transfer Form (IUT) from the Student Records Office, 130 Link Hall or online.

Submit the completed IUT Form. If there are any special circumstances that should be noted at the time the application is reviewed, they should be attached to the application.

At the end of each semester and following receipt of the latest grades, applications are reviewed by the Associate Dean and the appropriate Academic Chair. The schedule for review is as follows:

<table>
<thead>
<tr>
<th>Applications for</th>
<th>Reviewed</th>
<th>Student notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester</td>
<td>Dec-Jan</td>
<td>January</td>
</tr>
<tr>
<td>Spring Semester</td>
<td>May</td>
<td>June</td>
</tr>
</tbody>
</table>

3) Transfer Out of the College of Engineering and Computer Science. (IUT-OUT)

- Obtain an Intra-University Transfer Form (IUT) from the Student Records Office, 130 Link Hall or online.
- Check with the college/school into which you wish to transfer. Many have special requirements and application deadlines.
- Obtain the signature of the accepting (new) Dean.
- Submit the IUT form to the Registrar’s Office, 106 Steele Hall
**Leave Of Absence and Withdrawal**

Students desiring to take a Leave of Absence from the University must initiate such action in the Student Records Office, 130 Link Hall. Students should indicate the approximate date they intend to return to the University.

**Spring 2018** - Starting this semester if a student takes a Leave of Absence before Academic/Financial drop deadline, all courses are dropped from the transcript. Only the effective date of the leave of absence is recorded on the transcript.

After the academic/financial deadline, courses for which the student was registered remain on the transcript and grades of WD are recorded. Following the deadline to receive a WD, an F grade is recorded for all courses unless an approved petition has been filed with the Registrar’s Office. Students who take a leave of absence may not receive incomplete grades in courses for which they were registered. Only grades of WD or F can be recorded on the transcript.

**Missing Grades**

Missing grades (grades not reported by the instructor) do not calculate into the student's grade point average. The student should contact his/her instructor to determine why a grade is missing from the record. If the instructor cannot be located, the student should see the Chair of the department in which the course was taught.

To report a missing grade, the instructor submits a Missing Grade Report to the Chair of the department in which the course was taught. The form will then be sent to the student’s home college and finally submitted to the Registrar’s Office. **UNDER NO CIRCUMSTANCES MAY A STUDENT HAND-CARRY A MISSING GRADE REPORT.**

**Pass/Fail Option**

For students in Engineering majors: only social science, humanities, and free elective courses at the 300 level or higher may be taken pass/fail. Elective courses that must be taken from a specified list may not be taken pass/fail. The total hours of pass/fail courses permitted cannot exceed 18 credit hours.

For students in Computer Science and SIS major: only free elective courses may be taken pass/fail.

**Petitions**

Petition forms may be obtained in the Student Records Office, 130 Link Hall or [online](#). When petitioning, students must obtain the following signatures (in this order), unless otherwise noted below:

1. Faculty Advisor
2. Department Chair or Program Director
3. Senior Associate Dean

**Example**: you may petition to take a course in place of another; or you may petition to take an overload of courses. Undergraduates registering for more than 19 credit hours will be assessed the appropriate extra tuition charges, unless they qualify for an overload rate
exception; or you may petition to fulfill your Social Science/Humanities requirements with only Social Sciences, etc.

Students are responsible for checking with the Registrar’s Office and/or the Student Records Office to make sure the petition has been processed.

Petitions should be written as clearly and concisely as possible. They should contain all pertinent information since, in many cases, they are used in place of an interview. If the intention of the petition is not clear, it may be returned to the student for further clarification, and thus, delay the processing.

**Readmission/Termination of Leave of Absence**

Students who have taken a leave of absence or been withdrawn from the University must apply for readmission through the ECS Student Records office 130 Link Hall, Syracuse, NY 13244, (315) 443-5191. Readmission is contingent on space availability in the college and in the program to which the student seeks readmission. It is also dependent on the student's ability to demonstrate potential for completing the program of study successfully.

A student suspended for academic reasons is eligible to apply for readmission after at least one calendar year has elapsed from the date of the suspension. A student suspended for other reasons is eligible to apply for readmission according to the terms of the suspension. Students may be placed on academic probation for the first semester after reentering the University.

If the Leave of Absence from the University was for health reasons, the attending physician must submit a medical evaluation of the student's present state of health to the Office of the Vice President for Student Affairs, 306 Steele Hall, Syracuse, NY 13244-1120, (315) 443-4357. Health clearance must be granted by Student Affairs before an application for readmission can be considered.

**Registration**

Syracuse University uses a computerized registration system known as MySlice. ECS undergraduate students are put on Advising Hold every semester and must meet with their advisor before they can register for classes.

**Repeating a Course**

It is not necessary to petition to retake a course that was failed. Equivalent courses taken at other institutions are not counted as repeated courses. Courses may not be repeated after a student receives an undergraduate degree.

Any course with a D or F may be retaken. A course may be flagged up to two times: the higher of the two (or three) grades will be counted in the GPA. For courses taken more than once, the two earlier grades may be flagged by petition.
New York State TAP Recipients

REPEATED COURSES/TAP ELIGIBILITY
For purposes of TAP eligibility, a student must be enrolled full time (a minimum of 12 credits per semester). In some circumstances, the credits for repeating a course in which a student has already received a passing grade may not be included in the determination of full time enrollment for TAP purposes. If you have questions about this determination, you may contact the TAP coordinator in the Bursar's Office, 443-2444.

Please Note:
WE HAVE BEEN REQUESTED BY THE OFFICE OF STUDENT ASSISTANCE TO ALERT STUDENTS TO THE FOLLOWING STATEMENT REGARDING REASONABLE ACADEMIC PROGRESS:

"University, state, and federal regulations require that students receiving financial aid make reasonable academic progress toward a degree. This entails completing one-sixth of the program of study for each year of attendance. Financial aid progress regulations are established separately and may differ from your college's academic progress regulations. If you suspect your aid could be in jeopardy you should make an appointment with your Financial Aid Counselor."

Registration for More Then 19 Credit Hours (overload)
Undergraduate students who wish to register for more than 19 credits must present an approved petition to the Bursar’s Office. The petition, available from the Student Records Office, 130 Link Hall, must be approved by the student’s advisor and the Senior Associate Dean.

Juniors and seniors with a grade point average of at least 3.5 or higher cum GPA, with no outstanding incomplete grades and registered as a fulltime student at Syracuse University for the preceding two semesters, may take an overload without added tuition by completing the above petition. If you do not meet this criteria you will be charged extra tuition fees.

Honors students may sign up for this credit overload in the Honors Office. (For more information see the most current version of Tuition, Fees, and Related Policies).

Schedule Adjustment
Adding Courses during the first week of classes
During the first week of the semester (see Academic Deadlines in section I), students may change their schedules (adding and/or dropping courses) using MySlice on the web. If a student is on advising hold, he/she must meet with his/her advisor, and fill out and advising form. These forms are available in the Student Records Office.

The Faculty or Professional Advisor signature is required on the ECS Advising Form for all undergraduate students in ECS programs of study.

The advisor will keep a copy of the form in the student’s folder. Student will drop off a copy of the ECS Advising Form to the Student Records Office who will then process the removal of the advising hold within a 24 hour period.
Dropping a Course after the first week of classes
Students may drop courses up to the Academic Deadline for Dropping Courses. The add/drop form is used for this purpose. Forms are available at the Student Records Office, or from the Registrar’s Office, 106 Steele Hall.

The following signatures/stamps are required on the add/drop form:

1. Advisor
2. Course Instructor
3. ECS stamp, provided by Student Records Office in 130 Link Hall

The form must be delivered to the Registrar’s Office, 106 Steele Hall. Courses dropped by the deadline date are not recorded on the student’s transcript and are not counted in the calculation of the grade point average.

PLEASE NOTE: If you fail to complete a course (as a result of dropping, withdrawing, failing, or receiving an incomplete grade) you will not be able to register for additional courses for which the uncompleted course is a prerequisite.

ALSO NOTE: Courses with start and end dates different from those published in the Time Schedule of Classes may have different add/drop deadlines. For example, during the summer sessions, the last day to drop a course with a tuition refund is one week after the first day of classes. See the booklet, "Tuition, Fees, and Related Policies" for a complete statement of the University’s policy regarding the effect of add/drops on tuition charges.
Summer Courses
Students wishing to take summer courses at Syracuse University should contact University College, Division of Continuing Education, 700 University Ave, Syracuse, NY 13244, (315) 443-4174 for enrollment information.

Students wishing to obtain transfer credit for summer courses taken at another university must meet the requirements below:

1. Complete a Transfer Credit Approval Petition prior to taking the course
   - The Petition must contain:
     - The name of the school
     - The Name, number of the course & number of credits for each course
     - A description of each course from an official catalog, bulletin, or school website.
     - The equivalent S.U. course.
     - Any special circumstances, i.e., students who plan to transfer into the college of ECS should state this clearly
   - Obtain the advisor’s and department chairperson of the students major signature
   - Return the petition to the Student Records Office

2. Receive a grade of C or better (pass/fail grades are not acceptable)

3. No petition is needed if the course has been previously approved. See the list of approved courses in the Transfer Credit database.

4. Have an official transcript showing the course taken sent to:

   Syracuse University
   College of Engineering & Computer Science
   Student Records Office
   130 Link Hall
   Syracuse, New York
   13244-1240
   P:315-443-5191***F:315-443-4459
   Attn: Maria Marceau

Students should check the regulations of the school they are planning to attend as early as possible since many schools require written permission for non-matriculated students to register.

Withdrawal from a Course
Students may withdraw from a course up until two weeks before the last day of classes. A WD will appear on the student’s record but will not be counted in the grade point average.

Withdrawal petitions are available in the Student Records Office. The petition must be completed by the student and then the following signatures must be obtained:

1. Course Instructor
2. Student’s Advisor
3. Senior Associate Dean

Submit a withdrawal petition to the Registrar’s Office, 106 Steele Hall.

Withdrawal petitions will not be accepted after the deadline.
All University Requirements

English Courses for Foreign Students

All international students (and all students whose English is not their primary language) must take the English Language Assessment (ELA) upon arrival at Syracuse University. The results will determine what sequence of Writing or English courses must be taken. The sequence becomes a requirement for graduation in the College of Engineering and Computer Science and meets the University writing requirement. This sequence may result in extra credit hours required for graduation.

NOTE: Remedial English courses (ENL 201, 202, 203, 205, 207) do not count towards degree requirements.

Writing Courses

Writing Studio I and II (WRT 105, 205) are required for all students. Some students may satisfy the requirement by scoring 4 or 5 on the Advanced Placement English Language & Composition Exam of the CEEB or by earning 6 credits in SU’s Project Advance English course.

ENL 211 and 213, fulfill Syracuse University’s writing requirement for undergraduate students. Thus, after completing these courses, a student has taken the equivalent of WRT 105 and 205 and is ready to enroll in any other writing course that may be required.

All-College Requirements

Introduction to Engineering and Computer Science

All first-year ECS students are required to complete ECS 101, Introduction to Engineering and Computer Science. You will be registered for a section of this course by the major you have chosen or by the designation, undeclared. The section for each major is taught by a faculty member from that major; the sections for undeclared students are taught by senior faculty members in the College who have a broad, general knowledge of the majors. In the course, you will receive an introduction to each major offered in the College. In addition, you will spend the semester working with other students and a faculty instructor in developing a baseline of mathematical and scientific skills which you will apply in future course work.

Free Electives

Any course approved by the faculty advisor may be assigned to the free elective area. These may be technical or social science/humanities courses. Remedial courses may not be used towards these requirements. For Aerospace, Mechanical, Computer Science and SIS majors only, can use physical education as free electives.

Mathematics

All ECS students except Computer Engineering & Computer Science are required to complete the following calculus courses, MAT 295, MAT 296, and MAT 397. All programs of study require additional mathematics courses beyond these three courses.

Natural Sciences

All ECS students are required to complete at least one semester of calculus-based physics. All programs of study require additional natural science courses beyond the physics course.
Physical Education Courses (PED)
Physical Education Courses are not required.
*For Aerospace, Mechanical, Computer Science and SIS Majors*: PED courses may be used for free-elective credit only.

Remedial Courses
The following courses are considered by the College Faculty to be remedial and credit for these courses will not be counted toward the total credit hour requirement for graduation: Except SIS majors - MAT 194 - Pre-calculus is required for the major.

ENL 201 - Intermediate English for Non-Native Speakers
ENL 202 - Intermediate English for Non-Native Speakers
ENL 203 - Speaking and Listening for Non-Native Speakers of English
ENL 205 - Intensive Intermediate English for Non-Native Speakers
ENL 207 - Advanced Integrated Skills for Non-Native Speakers of English
MAT 193 - Algebra Infused Pre-Calculus
MAT 194 - Pre-Calculus

ROTC Courses
An ROTC course, which is cross-listed, with another Syracuse University course is treated in the same manner as the cross-listed course and may thus be used to satisfy degree requirements. ROTC courses, which are not cross-listed, will not count toward degree requirements. For CIS students, the courses, which are not cross-listed, may be used for free-elective credit.

Senior Year
Degree Works is available on MySlice, this is a web-based tool to help students and advisors monitor a student’s progress toward degree completion.

Degree Works combines Syracuse University’s degree requirements and the coursework a student has completed into an easy-to-read worksheet that helps to show a student what courses and requirements still need to be completed.

Responsibility for the verification of information in this report rests with you, the student. Final verification of all degree requirements are done by your department and Student Records Office.

This should be done prior to registration for the final semester. It is advisable that you do a preliminary check before registration for the final two semesters.

File Diploma Request
When an undergraduate student attains Junior standing (60 credits or more), the File Diploma Request link becomes available under Student Services in MySlice. Students must use this link to specify the term in which they intend to graduate and to provide information for their diploma. Students must also contact their home school or college to review all graduation requirements.
Diplomas & Status Verification
Graduating students notify the University of their intent to graduate through the File Diploma Request process, accessed through MySlice. This process must be completed to ensure inclusion in the degree certification review process and receipt of commencement information and, eventually, a diploma. Any questions or problems about diplomas should be directed to the Diploma Office, 106 Steele Hall, (315)443-2222.

During the interim period between certification and the receipt of the diploma, students may request a letter verifying their degree from the Student Records Office, 130 Link Hall. After you have received your diploma your degree can be verified through the National Clearinghouse.

Graduation
All students must have a minimum cumulative GPA of 2.00 and at least a 2.00 GPA in all ECS, Math & Science courses taken at Syracuse University. In addition, students must meet all degree requirements specific to their chosen major. Seniors graduating in May or August may attend the May Commencement Ceremony. December graduates attend graduation ceremonies held in the following May. For more information concerning commencement, contact the Special Events Office, 210 Women’s Building, 443-4631.

In addition to commencement, there is an annual College Convocation for seniors and their parents. All graduates are welcome to attend this event. Information about the ECS Convocation will be available during the Spring Semester.

Professional Engineer Exam
Students that are within 20 credits of an engineering baccalaureate degree are eligible to sit for the Fundamental of Engineering (FE) Exam. This exam is the first step in your pursuit to become a professional licensed engineer (PE). The FE exam is given year round at Pearson VUE Test Centers across the nation - interested students are responsible for scheduling their own test date and location via the following website http://ncees.org/engineering/fe/.
## Advance Placement Examinations

<table>
<thead>
<tr>
<th>Exam Subject/Title</th>
<th>Minimum Score</th>
<th>Awardable Credit</th>
<th>Equivalent SU Course</th>
<th>Recommending School/College</th>
<th>Additional School/College Requirements or Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art/2-D Design</td>
<td>5</td>
<td>3</td>
<td>Studio Elective</td>
<td>Visual and Performing Arts</td>
<td>Visual and Performing Arts Does not count toward Art and Design Freshman Foundation studio courses.</td>
</tr>
<tr>
<td>Art History</td>
<td>3</td>
<td>6</td>
<td>HDA 105, 106</td>
<td>Arts and Sciences</td>
<td>Pre-medical students should consult with health professions advising before accepting AP Biology credit.</td>
</tr>
<tr>
<td>Biology</td>
<td>4</td>
<td>8</td>
<td>BIO 121, 123 and 124</td>
<td>Arts and Sciences</td>
<td>Pre-medical students should consult with health professions advising before accepting AP Biology credit.</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3 or 4</td>
<td>3</td>
<td>CHE 103</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Only a score of 5 counts as a sequence in natural sciences and mathematics. Pre-medical students should consult with health professions advising before accepting AP Chemistry credit.</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5</td>
<td>8</td>
<td>CHE 106/107 &amp; 16/117</td>
<td>Arts and Sciences</td>
<td>Public Communications Must also place out of CHE 102 (with a score of 3) or CHE 201 (with a score of 4 or 5) on the placement exam.</td>
</tr>
<tr>
<td>Chinese</td>
<td>3</td>
<td>4</td>
<td>CHI 102</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of CHI 102 (with a score of 3) or CHI 201 (with a score of 4 or 5) on the placement exam.</td>
</tr>
<tr>
<td>Chinese</td>
<td>4</td>
<td>4</td>
<td>CHI 201</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of CHI 102 (with a score of 3) or CHI 201 (with a score of 4 or 5) on the placement exam.</td>
</tr>
<tr>
<td>Comparative Government &amp; Politics</td>
<td>3</td>
<td>4</td>
<td>PSC 101</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Computer Science A or Computer Science AB</td>
<td>3</td>
<td>3</td>
<td>CPS 196</td>
<td>Engineering and Computer Science</td>
<td>Engineering and Computer Science Students will receive this credit only upon approval of their department chair.</td>
</tr>
<tr>
<td>English Language and Composition</td>
<td>4</td>
<td>6</td>
<td>WRT 105-205</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Students scoring 4 or better will receive 3 credits for ETS 151. Such students who subsequently elect to take ETS 151 may transfer the credit to one of the following: ETS 117, 118, 152, or 153. 3 additional credits are awarded for WRT 105.</td>
</tr>
<tr>
<td>English Language and Composition</td>
<td>4</td>
<td>6</td>
<td>ETS151 (or 117 or 118 or 152 or 153) and WRT 105</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Students scoring 4 or better will receive 3 credits for ETS 151. Such students who subsequently elect to take ETS 151 may transfer the credit to one of the following: ETS 117, 118, 152, or 153. 3 additional credits are awarded for WRT 105.</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>3</td>
<td>3</td>
<td>EAR 200</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>European History</td>
<td>4</td>
<td>6</td>
<td>HST 111,112</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>French Language &amp; Culture</td>
<td>3</td>
<td>4</td>
<td>FRE 102</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of FRE 102 on the placement examination.</td>
</tr>
<tr>
<td>German Language &amp; Culture</td>
<td>3</td>
<td>4</td>
<td>GER 102</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of GER 102 on the placement examination.</td>
</tr>
<tr>
<td>Human Geography</td>
<td>4</td>
<td>3</td>
<td>GEO 105 or 171</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of LAT 102 on the placement examination.</td>
</tr>
<tr>
<td>Latin</td>
<td>3</td>
<td>4</td>
<td>LAT 102</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of LAT 102 on the placement examination.</td>
</tr>
<tr>
<td>Latin</td>
<td>4</td>
<td>4</td>
<td>LAT 201</td>
<td>Arts and Sciences</td>
<td>Public Communications Must also place out of LAT 102 on the placement examination.</td>
</tr>
<tr>
<td>Latin</td>
<td>5</td>
<td>7</td>
<td>LAT 201, 203, 320</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of ITA 102 on the placement examination.</td>
</tr>
<tr>
<td>Italian Language and Culture</td>
<td>3</td>
<td>4</td>
<td>ITA 102</td>
<td>Arts and Sciences</td>
<td>arts and Sciences Public Communications Must also place out of ITA 102 (with score of 3) or ITA 201 (with score of 4 or 5) on the placement examination.</td>
</tr>
<tr>
<td>Japanese language and Culture</td>
<td>3</td>
<td>4</td>
<td>JPS 102</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of JPS 102 (with score of 3) or JPS 201 (with score of 4 or 5) on the placement examination.</td>
</tr>
<tr>
<td>Macroecomics*</td>
<td>4</td>
<td>3</td>
<td>ECO 102</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of ECO 102 on the placement examination.</td>
</tr>
<tr>
<td>Microecomics*</td>
<td>4</td>
<td>3</td>
<td>ECO 101</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of ECO 101 on the placement examination.</td>
</tr>
<tr>
<td>Mathematics--Calculus AB</td>
<td>3</td>
<td>3</td>
<td>MAT 285</td>
<td>Arts and Sciences</td>
<td>Engineering and Computer Science 4 credits awarded for MAT 295 only, pending results of the math placement examination.</td>
</tr>
<tr>
<td>Mathematics--Calculus BC</td>
<td>4</td>
<td>6 or 4</td>
<td>MAT 285 and 286 or MAT 295</td>
<td>Arts and Sciences</td>
<td>Engineering and Computer Science Up to 8 credits awarded for MAT 295 only, pending results of the math placement examination.</td>
</tr>
<tr>
<td>Mathematics--Calculus BC AB sub-score</td>
<td>4</td>
<td>6 or 4</td>
<td>MAT 285 and 286 or MAT 295</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Exemption from Quantitative Skills and substitute for MAT 285 in natural sciences and mathematics.</td>
</tr>
<tr>
<td>Mathematics Level II</td>
<td>4</td>
<td>4</td>
<td>MAT 194</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Music Theory</td>
<td>3</td>
<td>3</td>
<td>HDA/MTC 125</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Awarded for non-music majors only.</td>
</tr>
<tr>
<td>Physics B</td>
<td>3</td>
<td>8</td>
<td>PHY 101,122</td>
<td>Arts and Sciences</td>
<td>Education (inclusive) will accept a score of 3 only after a grade of B+ or higher is earned in an SU lab/science course.</td>
</tr>
<tr>
<td>Physics B (Mechanics)</td>
<td>3</td>
<td>4</td>
<td>PHY 101 or 211,221</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of SPA 102 on the placement examination.</td>
</tr>
<tr>
<td>Physics C (Electricity and Magnetism)</td>
<td>3</td>
<td>4</td>
<td>PHY 102 or 212,222</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of SPA 102 on the placement examination.</td>
</tr>
<tr>
<td>Psychology</td>
<td>4</td>
<td>3</td>
<td>PSY 205</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of SPA 102 on the placement examination.</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>3</td>
<td>4</td>
<td>SPA 102</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of SPA 102 on the placement examination.</td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>3</td>
<td>4</td>
<td>SPA 102, 201</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of SPA 102 (with score of 3) or SPA 201 (with a score of 4 or 5) on the placement examination.</td>
</tr>
<tr>
<td>Statistics</td>
<td>3</td>
<td>3</td>
<td>MAT121,221 or STT101</td>
<td>Arts and Sciences</td>
<td>Management Credit accepted as MAS 261.</td>
</tr>
<tr>
<td>U.S. Government &amp; Politics</td>
<td>4</td>
<td>3</td>
<td>PSC 121</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of PSC 121 on the placement examination.</td>
</tr>
<tr>
<td>U.S. History</td>
<td>4</td>
<td>6</td>
<td>HST 101,102</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of HST 101,102 on the placement examination.</td>
</tr>
<tr>
<td>World History</td>
<td>4</td>
<td>6</td>
<td>HST 121, 122</td>
<td>Arts and Sciences</td>
<td>Arts and Sciences Public Communications Must also place out of HST 121,122 on the placement examination.</td>
</tr>
</tbody>
</table>
Partial List of acceptable Social Science/ Humanities courses:

Social Sciences Division
AAS (African American Studies)  PAF (Public Affairs)  NAT (Native American Studies)
HST (History)  *HNR (Honors)  WGS (Women’s & Gender Studies)
PSY (Psychology)  *GEO (Geography)  LAS (Latin American Studies)
*ANT (Anthropology)  PSC (Political Science)
MAX (Maxwell)  SAS (South Asian Studies)
SOC (Sociology)  MES (Middle Eastern Studies)
ECN (Economics)

Humanities Division
AAS (African American Studies)  LIN (Linguistics)  HOM & HOA (Art & Music Histories)
HST (History)  REL (Religion)  LAS (Latin American Studies)
PHI (Philosophy)  LIT (Literature)  MES (Middle Eastern Studies)
*ANT (Anthropology)  *HNR (Honors)  NAT (Native American Studies)
HUM (Humanities)  All Foreign Languages  SAS (South Asian Studies)
QSX (LGBT)  WGS (Women’s & Gender Studies)
ETS (English Textual Studies)  Studies

*See back of curriculum sheets for Major specific requirements*

Not a Social Science / Humanities courses

<table>
<thead>
<tr>
<th>Course Prefix</th>
<th>Course Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT</td>
<td>131</td>
</tr>
<tr>
<td>ANT</td>
<td>433</td>
</tr>
<tr>
<td>CFS</td>
<td>Any number</td>
</tr>
<tr>
<td>GEO</td>
<td>155</td>
</tr>
<tr>
<td>GEO</td>
<td>215</td>
</tr>
<tr>
<td>GEO</td>
<td>316</td>
</tr>
<tr>
<td>GEO</td>
<td>326</td>
</tr>
<tr>
<td>GEO</td>
<td>482</td>
</tr>
<tr>
<td>GEO</td>
<td>455</td>
</tr>
<tr>
<td>HNR</td>
<td>250</td>
</tr>
<tr>
<td>HNR</td>
<td>255</td>
</tr>
<tr>
<td>HNR</td>
<td>350</td>
</tr>
<tr>
<td>HNR</td>
<td>355</td>
</tr>
<tr>
<td>HNR</td>
<td>450</td>
</tr>
<tr>
<td>HNR</td>
<td>455</td>
</tr>
<tr>
<td>PSY</td>
<td>223</td>
</tr>
<tr>
<td>PSY</td>
<td>252</td>
</tr>
<tr>
<td>PSY</td>
<td>323</td>
</tr>
<tr>
<td>PSY</td>
<td>324</td>
</tr>
<tr>
<td>PSY</td>
<td>334</td>
</tr>
</tbody>
</table>

For the complete list of exceptions please see the course catalog.
Curriculum Requirements

All major curriculum requirements are posted on the ECS website.

Computer Science Students

Summary
The current Computer Science (CS) undergraduate curriculum was approved by the faculty of the department of Electrical Engineering and Computer Science in the Spring of 2011.

The requirements for the program of study are divided into three categories: general education, mathematics and major. The general education category has requirements in writing, presentation skills, natural science and engineering, and a requirement for courses offered by the College of Arts and Sciences or the College of Visual and Performing Arts. The major category has two parts—the computer science core, and the upper-division electives.

GENERAL EDUCATION
6 Writing (WRT 105, WRT 205)
3 Presentation Skills
18 Natural Science and Engineering (including ECS 101, 102 and PHY 211, 221)
21 Arts, Humanities, and Social Sciences (including PHI 251, ECS 392)
9 free electives

MATHEMATICS
15 or 16 Mathematics

MAJOR
33 Computer and Information Science core courses
18 upper-division courses
123 or 124 Credit hours total

Table 1: Credit hours required for the CS Bachelor’s program.

Important Notes on Course Restrictions
The restrictions on courses listed below are not comprehensive. Students unclear about the appropriateness of courses for meeting a distribution requirement must petition for acceptance of the course(s) through the CIS program committee before taking the course. Prior to registration each semester, students must meet with their faculty advisors for assistance in choosing appropriate courses.

General-Education Requirements
The intent of the general-education requirements is to ensure that students graduate with knowledge of subjects beyond Computer Science, with particular emphasis on writing skills.
Writing Requirements
The following two courses are required (no grade below C- is acceptable):
- WRT 105  Writing Studio I
- WRT 205  Writing Studio II

Presentation Skills Requirement
Students must successfully complete at least one of the following courses:
- CRS 255  Public Advocacy
- CAS 325/CRS 325  Presentational Speaking
- IST 344  Information Reporting and Presentation

Natural Science and Engineering Requirements
Eighteen credits of natural science and engineering courses are required: six in engineering and twelve in science. These engineering courses are required:

- ECS 101  Introduction to Engineering and Computer Science  
- ECS 102  Introduction to Computing

The twelve credits of science must include a two-semester sequence in a laboratory science, as well as the following courses:

- PHY 211  General Physics
- PHY 221  General Physics Lab

A student may take the second physics course (PHY 212) and its associated lab (PHY 222) to satisfy the two-semester requirement; the student would still have to take an additional four credits of science. Possible two-course sequences include the following:

- PHY 211/221 (General Physics I and Laboratory) and PHY 212/222 (General Physics II and Laboratory)
- CHE 106/107 (General Chemistry Lecture and Laboratory) and CHE 116/117 (General Chemistry Lecture II and Laboratory)
- BIO 121 (General Biology) and BIO 123/124 (General Biology II and General Biology II Laboratory)

Additional courses that may be used to complete the science requirement include those in the following departments, except those courses specifically excluded or whose content relates primarily to computing and/or mathematics, or to social and historical issues. Such courses may be appropriate for other distribution requirements.

Anthropology, Physical (ANT 131, 331, 431, 432, 433)  Biology (BIO) 
Chemistry (CHE)  Earth Sciences (EAR) 
Materials Science (MTS)  Physics (PHY)

The following courses do not satisfy the science requirement:
- Social, Cultural Anthropology (ANT)  Astronomy (AST)
BIO 211  
CHE 103, 113  
EAR 102, 105  
PHY 101/111, 102/112, 105, 106

**Arts, Humanities, and Social Sciences Requirements**

Students are required to take PHI 251 (*Logic*), ECS 392 (*Ethical Aspects of Engineering and Computer Science*), and fifteen additional credit hours of courses in fine arts, humanities, and/or social sciences. These courses (A/H/SS) are to be drawn from the offerings of the College of Arts and Sciences and the College of Visual and Performing Arts. In general, courses from the following departments may be used:

- Art Photography (APH)
- African American Studies (AAS)
- Asian/Asian American Studies (AAA)
- Applied Music (AMC)
- American Studies (AMS)
- Anthropology–Social and Cultural Studies (ANT)
- Arabic (ARB)
- Art (ART)
- Ceramics (CER)
- Chinese (CHI)
- Communications Design (CMD)
- Communication and Rhetorical Studies (CRS)
- Drama (DRA)
- Economics (ECN)
- English and Textual Studies (ETS)
- Fiber Arts (FIB)
- Film (FIL)
- Foundation (FND)
- French (FRE)
- Fashion Illustration (FSH)
- Geography (GEO)
- German (GER)
- Greek (GRE)
- Hebrew (HEB)
- Hindi (HIN)
- History (HST)
- History of Art (HOA)
- History of Music (HOM)
- Humanities (HUM)
- Illustration (ILL)
- International Relations (IRP)
- Interior Design (ISD)
- Italian (ITA)
- Japanese (JPS)
- Korean (KOR)
- Latin (LAT)
- Latin American Studies (LAS)
- Linguistics (LIN)
- Literature in Translation (LIT)
- Middle Eastern Studies (MES)
- Museum Studies (MUS)
- Music History & Literature (MHL)
- Native American Studies (NAT)
- Public Affairs & Citizenship (PAF)
- Philosophy (PHI)
- Polish (POL)
- Political Science (PSC)
- Psychology (PSY)
- Printmaking (PRT)
- Painting (PTG)
- Queer Sexuality (QSX)
- Persian (PRS)
- Portuguese (POR)
- Religion (REL)
- Russian (RUS)
- Sculpture (SCU)
- Sociology (SOC)
- Social Science (SOS)
- South Asian Studies (SAS)
- Spanish (SPA)
- Surface Pattern Design (SPD)
- Studio Arts (STA)
- Kiswahili (SWA)
- Turkish (TRK)
- Art Video (VID)
- Women’s and Gender Studies (WGS)
- Writing (WRT)
The following courses/departments cannot be used:

- Art Education (AED)
- Astronomy (AST)
- Advertising Design (ADD)
- Anthropology–Physical (see above)
- Biology (BIO)
- Chemistry (CHE)
- Cognitive Science (COG)
- Communication Sciences & Disorders (CSD)
- Computer Art (CAR)
- Earth Sciences (EAR)
- Industrial Design
- (IND) Mathematics
- Music (MUE)
- Non-departmental AS (NAS)
- Physics (PHY)
- Science Teaching (SCI)
- Undergraduate Research Program (URP)
- WRT 105, WRT 205

Also excluded are any courses cross-listed in the College of Arts and Sciences and the School of Education, as well as the following courses:

- ANT 131, 431, 433
- CFS courses
- GEO 155, 215, 316, 326, 455, 482, 583
- HNR 250, 255, 350, 355, 450, 455
- PSY 223, 252, 323, 324, 334

Free Electives
Any and all courses may be taken as free electives, with the following exceptions:

- CPS courses do not count as free-elective credits for CS majors.
- ENL courses do not count as free-elective credits.

Mathematics Requirements
Fifteen or sixteen credit hours of Mathematics courses are required. No grade below C- is acceptable. Students must take the following three courses:

- MAT 295 Calculus I (4 credits)
- MAT 296 Calculus II (4 credits)
- CIS 321 Introduction to Probability and Statistics (4 credits)

In addition, students must also take at least one of the following courses:

- MAT 397 Calculus III (4 credits)
- MAT 331 Linear Algebra (3 credits)

Note: Students may petition to satisfy the 4-credit CIS 321 requirement by completing the 6-credit combination of MAT 521 and MAT 525. This option may be preferable for students pursuing a dual major or minor in mathematics.
Course Requirements for the Major

CIS Core Course Requirements

The following ten courses (33 credit hours) are required. These courses must be completed with a core GPA of at least 2.667. No grade below C– is acceptable for a core course.

- CIS 252 Introduction to Computer Science
- CIS 375 Introduction to Discrete Mathematics
- CIS 341 Computer Organization and Programming Systems
- CIS 342 Introduction to Systems Programming
- CIS 351 Data Structures
- CIS 352 Programming Languages: Theory and Practice
- CIS 453 Software Specification and Design
- CIS 454 Software Implementation
- CIS 473 Automata and Computability
- CIS 477 Introduction to Analysis of Algorithms
- CIS 486 Design of Operating Systems

The diagram on the right shows the prerequisite structure of the core courses. As always, check with the course catalog and the course instructor for details.

Upper-Division Course Restrictions

Eighteen credit hours of upper-division courses are required: at least 9 of the 18 credits must be computer science or computer engineering courses. No grade below C– is acceptable for an upper-division elective.

Upper-division courses include the following:

- CIS 400 Selected Topics
- CIS 425 Intro to Computer Graphics
- CIS 428 Intro to Cryptography
- CIS 444 Mobile Application Programming
- CIS 451 Modern Programming in Java
- CIS 458 Data Networks: Basic Principles
- CIS 467 Intro to Artificial Intelligence
- CIS 468 Natural Language Processing
- CIS 471 Optimization Methods
- CIS 478 Intro to Quantum Computing
- CIS 483 Intro to Computer and Network Security
- CIS 487 Access Control, Security, and Trust
- CIS 488 Intro to Internet Security
- CIS 543/ELE 516 Control of Robots
- CIS/MAT 545 Finite Mathematics
- CIS 551 Modern Programming in Java
- CIS 554 Object Oriented Programming in C++
- CSE 381 Computer Architecture
- CSE 397 Computer Laboratory I
- CSE 398 Computer Laboratory II
- CSE 483 C# and Windows Programming
- CSE 491 Senior Design Project I
- CSE 492 Senior Design Project II
- CSE 561 Digital Machine Design
- CSE 581 Intro to Database Management Systems
- PHI 378 Minds and Machines
- PHI 551 Symbolic Logic
- PHI 552 Modal Logic
In general, students may choose any other CIS course numbered above 300, except those that carry no credit hours. However, the following courses do not qualify as upper-division electives:

**CIS 470 Experience Credit**
**CIS 490 Independent Study**

CS students may also choose any MAT courses at the 400 level or higher, except for the following:

**MAT 421 Applied Probability and Statistics**
**MAT 485 Differential Equations and Matrix Algebra for Engineers**
**MAT 521 Introduction to Probability**

CS students may also choose topics courses (e.g., PHI 460 *Logic and Foundations of Mathematics*); however, they must petition the CIS program committee to have the specific course accepted before taking the course.

**Representative CIS Undergraduate Programs**

Here is a fairly typical CIS undergraduate program for a student who initially places into MAT 295.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ECS 101</td>
<td>CIS 252</td>
</tr>
<tr>
<td></td>
<td>ECS 102</td>
<td>MAT 296</td>
</tr>
<tr>
<td></td>
<td>MAT 295</td>
<td>PHY 211, PHY 221</td>
</tr>
<tr>
<td></td>
<td>WRT 105</td>
<td>PHI 251</td>
</tr>
<tr>
<td></td>
<td>A/H/SS elective *</td>
<td></td>
</tr>
<tr>
<td>Second Year</td>
<td>CIS 375</td>
<td>CIS 321</td>
</tr>
<tr>
<td></td>
<td>CIS 351</td>
<td>CIS 341, CIS 342</td>
</tr>
<tr>
<td></td>
<td>MAT 397 or MAT 331</td>
<td>CIS 352</td>
</tr>
<tr>
<td></td>
<td>A/H/SS elective</td>
<td>WRT 205</td>
</tr>
<tr>
<td></td>
<td>free elective</td>
<td>free elective</td>
</tr>
<tr>
<td>Third Year</td>
<td>CIS 453</td>
<td>CIS 454</td>
</tr>
<tr>
<td></td>
<td>CIS 477</td>
<td>CIS 473</td>
</tr>
<tr>
<td></td>
<td>CIS 486</td>
<td>upper-division course</td>
</tr>
<tr>
<td></td>
<td>presentation-skills elective</td>
<td>A/H/SS elective</td>
</tr>
<tr>
<td></td>
<td>science elective</td>
<td>science elective</td>
</tr>
<tr>
<td>Fourth Year</td>
<td>upper-division course</td>
<td>upper-division course</td>
</tr>
<tr>
<td></td>
<td>upper-division course</td>
<td>upper-division course</td>
</tr>
<tr>
<td></td>
<td>ECS 392</td>
<td>A/H/SS elective</td>
</tr>
<tr>
<td></td>
<td>A/H/SS elective</td>
<td>free elective</td>
</tr>
</tbody>
</table>

*Students wishing to preserve the option of transferring to an engineering major at the end of the first semester should take CHE 106/107 in place of the A/H/SS elective.*
Here is a fairly typical CIS undergraduate program for a student who initially places into MAT 194.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ECS 101</td>
<td>CIS 252</td>
</tr>
<tr>
<td></td>
<td>ECS 102</td>
<td>MAT 295</td>
</tr>
<tr>
<td></td>
<td>MAT 194</td>
<td>PHY 211, PHY 221</td>
</tr>
<tr>
<td></td>
<td>WRT 105</td>
<td>PHI 251</td>
</tr>
<tr>
<td></td>
<td>A/H/SS elective*</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>CIS 375</th>
<th>CIS 321</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CIS 351</td>
<td>CIS 341, CIS 342</td>
</tr>
<tr>
<td></td>
<td>MAT 296</td>
<td>WRT 205</td>
</tr>
<tr>
<td></td>
<td>A/H/SS elective</td>
<td>MAT 397 or MAT 331</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th>CIS 453</th>
<th>CIS 473</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CIS 477</td>
<td>CIS 352</td>
</tr>
<tr>
<td></td>
<td>CIS 486</td>
<td></td>
</tr>
<tr>
<td></td>
<td>presentation-skills elective</td>
<td>A/H/SS elective</td>
</tr>
<tr>
<td></td>
<td>science elective</td>
<td>science elective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Year</th>
<th>upper-division course</th>
<th>upper-division course</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>upper-division course</td>
<td>upper-division course</td>
</tr>
<tr>
<td></td>
<td>ECS 392</td>
<td>A/H/SS elective</td>
</tr>
<tr>
<td></td>
<td>A/H/SS elective</td>
<td>free elective</td>
</tr>
</tbody>
</table>

*Students wishing to preserve the option of transferring to an engineering major at the end of the first semester should take CHE 106/107 in place of the A/H/SS elective.*