

College of
Engineering &
Computing Sciences

Undergraduate Advising Manual 2018–2019

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Overview

This College of Engineering and Computing Sciences Advising Manual has been prepared to assist students in understanding what is required to earn a degree in engineering and/or computing sciences at NYIT as well as introducing them to different policies, procedures, and services. The manual is updated periodically and subject to change. Every effort has been made to align the contents of the manual with the NYIT Undergraduate Catalog, and the NYIT Student Handbook

If you have any questions, please contact the College of Engineering and Computing Sciences at 516.686.7985.

Classification of Students by Credits

Freshman: Less than 31 earned credits Sophomore: 31–62 earned credits

Junior: 63-96 earned credits

Senior: More than 96 earned credits

Attendance Policy

Students are expected to attend each class session on a regular and punctual basis to obtain the educational benefits that each meeting affords. Students shall be informed by their instructors whether latenesses or absences will be allowed during the semester. Instructors shall inform students of the consequences following excessive absences and/or latenesses. In the event of a student's absence from a test, the instructor will generally determine whether the student will be allowed to make up the work. The privilege of taking a make-up examination is generally not extended beyond one semester from the original date of examination. Make-up examinations are under the jurisdiction of the appropriate academic dean.

Academic Advising

NYIT recognizes that academic advising is a critical component of the educational experience. As a result, a range of advising resources are available to assist students in creating meaningful educational plans that are compatible with their career goals. These resources include faculty advisors, Advising & Enrichment Center (AEC) staff, peer advisors, and a comprehensive website with tools such as advisor schedules, semester maps, and advisement preparation guidelines.

First-Semester Academic Advising:

All incoming first-year students are advised by a first-semester advisor regarding their initial semester's courses. In addition to providing course selection guidance, first-semester advisors discuss degree requirements, share academic resources, and assist students with online course registration. For those requiring a placement exam, first-semester advisement occurs immediately following the exam. Students who have transfer credit for a math course will be waived from a placement exam and can proceed to meet with a first semester advisor. Students transition to a faculty advisor in their major for advisement in subsequent semesters. AEC advisors will meet with new freshman and transfer students to review progress, discuss NYIT resources, and go over progress reports during mid semester check-ins.

Faculty Advisor:

Once advised for their first semester, students will meet with a faculty or staff advisor associated with their major for academic advisement for all future semesters. Students are not assigned an advisor and can meet with any faculty/staff advisor within their discipline. Advisors guide students with their educational planning and provide career-related advice. In order to ensure all curriculum requirements are being satisfied, students are required to meet with an advisor before registration each semester. Although advisors guide students through this process, the student must assume final responsibility for conforming to all college regulations and completing degree requirements. To find an advisor, click the "Advising Appointments" tile in the My.NYIT portal or view advisor schedules at nyit.edu/advising/find_an_advisor.

Advising & Enrichment Center

The Advising & Enrichment Center (AEC) offers advisement support and resources as well as academic support services and programs to undergraduate students within the NYIT community. The AEC is committed to providing enrichment services and programs that help students reach their academic and career goals, including:

Academic Advisement
Change of Major Counseling
Graduation Planning
Peer Advising
Supplemental Instruction
Peer Tutoring
Academic Probation Counseling

For general inquires, email aec@nyit.edu. Interested in meeting with an AEC advisor? Schedule an appointment with an AEC advisor online by clicking the "Advising Appointments" tile in the My.NYIT portal and choosing the Advising and Enrichment Center location on your home campus.

Be Prepared

Each semester, before you register for classes, you will need to meet with an academic advisor to review your curriculum and academic progress before receiving approval for course selections. Though an advisor will provide guidance, it is ultimately your responsibility to ensure you are meeting degree requirements.

Take the Next Step

- 1. Find your degree requirements by reviewing your Student Advising Report (STAR) in your Student Center and semester map.
- 2. Visit the Advising and Enrichment Center for assistance with advisement preparation and to meet with a Peer Advisor.
- 3. Make an appointment with a faculty advisor by logging into My NYIT and selecting the "Advising Appointments" tile.

AEC Advisors are professional, generalist advisors who serve incoming first-year students and incoming transfer students, as needed. Additionally, though students receive primary advisement from assigned faculty or staff within their academic departments, the AEC provides supplemental advising and graduation planning support to current undergraduate students.

Students who need assistance with major exploration are also encouraged to visit the AEC to receive guidance on their options and the change-of-major process. For additional information, go to NYIT Advising.

Peer Advisors (PAs) are upperclassmen who work under the supervision of the AEC and provide support to undergraduate students on matters related to advisement and registration. PAs assist with the explanation of degree requirements, planning of future coursework, and navigation of online tools such as NYITConnect, Schedule Planner, and online registration. They also assist students with adjusting to university life by helping them become familiar with the policies and procedures outlined in the course catalog and student handbook. For additional information, go to Peer Advising.

Enrollment Services Center

The Enrollment Services Center (ESC) is a one-stop resource for:

Answers to all your school-related questions, simple or complex.
Assistance with registration, records, and financial aid.
Personalized guidance.
Referrals to a wealth of campus resources.

Our ESC senior specialists are trained to approach your issues holistically and individually. We anticipate issues before they arise, and make sure you always have the right information to keep your college career on track. We are here to help you understand and take care of the "business" of college life.

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Explain your financial aid (scholarships, loans, and grants).
Review your accounts to confirm your paperwork is completed and on time.
Explain all steps necessary for full loan eligibility.
Help with scholarship and economic appeals.

Bursar

Explain your current balance.
Clarify payment due dates.
Explain liability for withdrawing and dropping courses.
Provide tuition payment plan information.

Registrar

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	Assist with online registration and class scheduling.
	Clarify approvals for prerequisites, closed courses, and credit overload.
	Provide in-person registration for courses that require special approval.
	Clarify course add/drop and withdrawal policies and deadlines.
	Assist with transcript and diploma requests.

First-Year Students

During your first year as an undergraduate student at NYIT, your ESC senior specialist will help you navigate the different services and offices available to you.

- Organize all aspects of your records: Financial Aid, Bursar, Registrar, Academics.
- Serve as the point of contact with your academic department and advisors.
- Help with your transition to NYIT in your first year.

Contact Us

If you need assistance, contact the Enrollment Services Center at askesc@nyit.edu or call 516.686,7878.

Old Westbury

Harry Schure Hall, 1st Floor Phone: 516.686.7878 Fax: 516.686.1463

askesc@nyit.edu

Manhattan

16 W. 61st St., 1st Floor Phone: 516.686.7878 Fax: 212.261.1750

askesc@nyit.edu

Prerequisite and Co-requisite Courses

Many courses require prerequisite and/or co-requisite courses. A prerequisite course must be passed prior to taking the desired course, and a co-requisite course must be taken at the same time (or in some cases taken before). The chair or dean of the program that offers the course may waive these course requirements. Prerequisite and co-requisite requirements are listed in the course descriptions of this catalog.

Each student is responsible for meeting all necessary course prerequisites and corequisites. If a student enrolls in a course but has not fulfilled the prerequisites or corequisites for it, the department chair has the authority to administratively withdraw the student from the course. The student will also be referred to the Office of Student Affairs, if he/she fails to comply and adhere to the administrative action taken by the academic department in regard to the course.

Online Courses

NYIT domestic students can register for online courses if they have achieved satisfactory academic status. Refer to the Academic Standing: Probation and Dismissal section of this manual for the policy pertaining to guidelines on satisfactory academic status.

For all NYIT students on an international visa, the number of credits that may be taken online is based on the United States policy for international students and any applicable policies from their home country.

Registration and Enrollment

Registration information is published prior to the beginning of each registration period. Each student is responsible for completing the registration procedure, conforming to all college regulations, and completing curriculum requirements.

Students must register on the dates indicated on the <u>Academic Calendar</u>. Registration procedures are the same for degree candidates and non-matriculated

students. The student's advisor is available for help and guidance, and the advisor's approval is required for each registration.

Early registration within the designated period ensures the most flexible choice of program and eliminates early cancellation of enrolled course sections. A course may be canceled by NYIT for any reason, including insufficient enrollment.

Official registration in a course section is required to earn a grade for a class. Registration must be completed by the end of the change of program period (see academic calendar). Therefore, students who have not officially registered for a course section will not receive a grade retroactively. Students cannot be officially registered until all tuition and fees are satisfied.

Attendance is not permitted in any class without official registration for that class.

Register for Classes

Step 1: Take Care of Outstanding Business

- File your <u>FAFSA</u>
- Submit outstanding admissions documents and financial aid forms.
- Pay outstanding balances from the previous semester.
- Check for and clear holds on your student account by logging in to <u>my.nyit.edu</u>.
 If there is a hold on your account, contact the appropriate office (Admissions,
 Bursar, Health Services, etc.) to resolve it.

Step 2: Print Out Required Forms

- <u>Student Advisement Report (select "academic requirements" from the dropdown on your Student Center)</u>
- Semester Map for your major
- Registration Form
- Advisement Preparation Form

Step 3: Meet with A Peer Advisor

(RECOMMENDED FOR FIRST-YEAR STUDENTS)

- Check Peer Advising office hours on your campus.
- Together with a peer advisor, prepare your course selections using your Advisement Preparation Form and Semester Map.
- Peer Advisors can assist with navigation of the Schedule Planner tool to create a possible schedule.

Step 4: Meet with an Academic Advisor (REQUIRED)

• Schedule an appointment with your faculty advisor by selecting the "Advising Appointments" tile in My.NYIT. You first choose the location, faculty advisor,

- then day/time.
- Bring your completed <u>Student Advisement Report</u>, <u>Advisement Preparation</u> <u>Form</u>, and <u>Registration Form</u>.
- Your advisor will approve your courses by signing the registration form and opening your online registration record.

Step 5: Register for Classes

On your assigned registration day, log on to my.nyit.edu with your user name and password. If you don't have those, you log on to my.nyit.edu by clicking on "Create Account" and following the instructions.

It's time to select a class schedule and register:

- 1. Go to my.nyit.edu.
- 2. Enter your user name and password.
- 3. Click on the NYITConnect (Students).
- 4. Click on the "Enroll" option.
- 5. If you already know the class number, type it and click enter. If not, click on "Search" and choose your campus location.
- 6. Select courses you want and then click on "Next." The courses will be added to the shopping cart.
- 7. Go to the "Plan" tab, then click on "Shopping Cart". You will see your courses. Select them and click on the "Enroll" button.
- 8. A successful registration will generate a green check mark ($\sqrt{}$) next to each course. If you see a red mark (X), read the message to find out why the course registration was unsuccessful.
- 9. Payments may be made through your NYIT account, or visit the office of the bursar for other financial arrangement.

If you are unable to register online, take your signed registration form to the Enrollment Services Center.

Withdrawing from a Class

The decision to withdraw from a course should be made only after consulting with the course instructor and faculty advisor. Withdrawing from a course may affect eligibility for financial aid. Consult with the Office of Financial Aid for more information. To withdraw from a course, the student and the instructor must complete a withdrawal form, and the instructor must submit it to the Office of the Registrar within 48 hours. A "W" grade cannot be assigned without submission of the withdrawal form to the registrar. Students cannot withdraw from classes during the final exam period.

Students can withdraw between the third and eighth weeks of the semester (between the third and eighth class meetings for cycle courses) and will receive a grade of W. The W grade is not included in the computation of the cumulative GPA, but it may affect financial aid eligibility.

The type of withdrawal grade assigned will be determined by the date of withdrawal and is outlined in the table schedule below. The withdrawal (W) grade will be assigned to students who officially withdraw from a class according to this schedule. The withdrawal failing (WF) grade may be assigned if the student is failing the course or stopped attending class without officially withdrawing. The W grade is not included in the computation of the GPA, but it may affect eligibility for financial aid. The WF is a failing grade; it is included in the computation of the GPA and may affect eligibility for financial aid.

Term	Date of Withdrawal	Withdrawal Grade
Fall and Spring Semesters	Third through eighth week of the semester	W
	After the eighth week of the semester	W or WF
Cycle A, B, C, D	Third through eighth class session	W
	After the eighth class session	W or WF
Summer I, II, III	See academic calendar	
Intersession	Before second class session	W
	After second class session	W or WF

Add/Drop Period

Students are permitted to add and drop classes during the change of program period after consulting with an advisor. No change of program may be made after the second week of each semester (see academic calendar for dates). A change in courses (not sections) may affect the tuition charged and financial aid eligibility. Undergraduate students should not register for graduate courses without permission because this may jeopardize their financial aid.

Incomplete Grades

The temporary grade of Incomplete (I) shall change to a Failing (IF) grade if the student does not complete all work by the end of the allotted time. An IF grade may not be challenged, and the course must be repeated by the student to receive credit. The following policies shall guide the awarding and calculation of the I grade, and the change of the I grade to an IF grade: ☐ The student must request additional time to complete a single project, report, or final examination. ☐ The grade of incomplete is to be assigned only to students who are otherwise passing the course at the end of the semester. ☐ The instructor has the right to refuse the request and may assign a final grade based solely on the work already completed. □ The grade of incomplete will change to a failing grade if the outstanding coursework is not completed in accordance with the schedule in effect at the time it was assigned, regardless of the average the student otherwise maintained in the class (see academic calendar for dates). ☐ A single short extension of the time period shall be granted only in exceptional circumstances by the Vice President for Academic Affairs. ☐ The grade of incomplete will not be assigned to students with excessive absences, especially when those absences include the final sessions of the course, unless extenuating circumstances have been established. ☐ The incomplete grade is recorded by the registrar as "attempted credits," until the course is complete.

- The incomplete grade that changes to a failing grade will carry zero quality points.
- Students can advance if an incomplete grade is assigned to a prerequisite course for the term immediately following the assignment of an I grade but cannot advance after an I grade changes to an IF.
- □ When the grade of incomplete is changed to an IF, the I grade shall remain on the record and the transcript so that it will read IF, thereby distinguishing it from the F and the WF grades.
- I grades may have an effect on the student's financial aid and/or student visa status. Students are encouraged to meet with the financial aid and/or international student advisor when requesting the I option.

Closed Courses/Sections

If you are closed out of a section during the registration process, you may request approval from the chairperson of the department in which the course is taught. You must see your academic advisor in the College of Engineering and Computing Sciences.

Intersession and Summer Session Classes

Log in to NYITConnect and use the Schedule Planner to see winter intersession or summer session courses. Intersession runs for approximately two weeks after

January 1. Three summer sessions are available. The <u>academic calendar</u> shows the current year intersession and summer session dates

Off-Campus Courses

Matriculated students in good academic standing who are currently enrolled at NYIT may take courses at another accredited institution for credit. Since not all courses will be accepted for credit toward a degree, students must complete the **Permission to Take Courses at Another College** form, available at the Office of the Registrar, and abide by NYIT's residency requirements (see section regarding transfer credits). A course may be taken at another college only when it is unavailable at NYIT during the specific semester.

Upon completing a course, students have the responsibility for furnishing the Registrar's Office with official transcripts used to enter credit in their records. An official transcript must be received at NYIT no later than one month after the course is completed. A grade of C- or better is required for credit. Transfer credit grades will not impact a student's GPA. Students on probation may not take courses at another college. Students with 70 cumulative credits (including transfer credit and credits in progress at NYIT) must take courses at a senior-level institution.

Teacher education candidates who are given permission to take an education course at another college may be required to submit additional documentation demonstrating achievement of specific knowledge or skills related to the course not taken at NYIT. This documentation may include keystone assignments, lesson plans, field experience logs, essays, or student work samples.

Returning Students

Are you a Returning Student?

If you are returning after more than one semester away from NYIT (not including summer) Welcome Back! You are considered a returning student.

For additional information, go to Returning Students

Academic Probation

A student must achieve a minimum cumulative GPA of 2.0 to graduate. A minimum cumulative GPA of 2.0 must be achieved at the end of each regular semester (fall and spring) to maintain satisfactory academic status at NYIT.

Probation I: The first time a student's cumulative GPA falls below the minimum required, the student shall be placed on Probation I for his/her next regular semester. The student will receive an email from the Office of the Registrar outlining available

academic support services and requiring the student to meet with an advisor from the Advising and Enrichment Center.

Probation II: When a student's cumulative GPA falls below the minimum required for two regular semesters (not necessarily contiguous), the student shall be placed on Probation II for his/her next regular semester. The student will receive an email from the Office of the Registrar outlining available academic support services and requiring the student to meet with an advisor from the Advising and Enrichment Center. A student on Probation II status cannot register for more than 14 credits until he/she is removed from Probation II status.

For more information about Academic Probation, visit <u>Academic Policies</u>. If you are concerned about your academic progress, please contact <u>aec@nyit.edu</u> to schedule an appointment.

CoECS Academic Standards Policy

- Students enrolled in the ME or ECE program must earn a grade of C- or higher in all required math, physics, computer science, and engineering courses. Grades of D+ or below cannot be counted towards a student's degree.
- In the case of a transfer student who earned a transferable grade lower than a C-in any required math or physics course prior to attending NYIT, the grade is only acceptable if the student completed a more advanced course within the same discipline with a grade of C- or higher at the prior institution. Grades of D+ or lower are not transferrable for any computer science or engineering courses.
- Undeclared students who intend to pursue Mechanical Engineering or Electrical and Computer Engineering must meet the conditions above in order to qualify for entrance into the program.

Dismissal

When a student's cumulative GPA falls below the minimum required for three regular semesters (not necessarily contiguous), the student will be dismissed from the institution. Students who have been dismissed may appeal to the Committee on Academic Probation and Dismissal and must do so no later than 3 weeks after the last day of the semester in which they were dismissed. On the basis of the appeal and other relevant information, the Committee may uphold the dismissal decision or may recommend reversal of the dismissal decision and impose additional conditions for continued enrollment. The Committee's decision is binding and final. Failure to submit an appeal by the given deadline will result in automatic upholding of the dismissal.

Dismissed students are ineligible to pursue credit-bearing courses at NYIT for a period of one year or until a minimum GPA of 2.5 is earned for the most recent 12 credits completed at another accredited U.S. institution of higher education, and until he or she receives approval from the Committee on Academic Probation and Dismissal. To obtain approval, the student must submit an appeal letter to the Committee no later than 2 weeks prior to the start of the semester for which the student is reapplying. The Committee will make the admission decision and if readmitted, the student will be placed on Probation II.

Academic Integrity

Plagiarism is the appropriation of all or part of someone else's works (such as and not limited to writing, coding, programs, images, etc.) and offering it as one's own. Cheating is using false pretenses, tricks, devices, artifices, or deception to obtain credit on an examination or in a college course.

If a faculty member determines that a student has committed academic dishonesty by plagiarizing, cheating or in any other manner, the faculty member may:

- 1. Fail the student for that paper, assignment, project, and/or exam;
- 2. Fail the student for the course:
- 3. File a formal charge of misconduct pursuant to the <u>Student Code of Conduct</u>, <u>Academic Probation and Suspension</u>.

Each student enrolled in a course at NYIT agrees that, by taking such course, he/she consents to the submission of all required papers for textual similarity review to any commercial service engaged by NYIT to detect plagiarism. Each student also agrees that all papers submitted to any such service may be included as a source document in the service's database, solely for the purpose of detecting plagiarism of such papers.

The complete Academic Integrity Policy may be found in the Student Handbook, at NYIT Policy.

Academic Support Services

The Learning Center helps NYIT students meet their academic goals by providing free tutoring and skill-building workshops. Experienced peer tutors offer assistance in a wide range of undergraduate courses and skill-building subjects, such as time management and study skills, in a one-to-one, online, or small group setting. For additional information, please visit nyit.edu/tutoring.

Online Tutoring is available to all enrolled NYIT students. This service supplements Learning Center hours by offering real-time online tutoring for a variety of subjects, some of which are available 24 hours a day, seven days a week. Students can access online tutoring from their MyNYIT student portal. For additional information, please visit

nyit.edu/tutoring.

Supplemental Instruction (SI) is a non-remedial academic support program that targets historically challenging courses in an effort to increase student performance for those who participate in the program. Students who have successfully completed one of these courses, and are recommended by the faculty, are chosen as SI Leaders to facilitate regularly scheduled out-of-class SI sessions for students enrolled in the assigned course. SI sessions are seminars in which SI Leaders help further students' understanding of course concepts by reviewing notes, discussing readings, developing organizational tools, and preparing for examinations. For additional information, please visit mxit.edu/si.

Academic Monitoring: After each semester, students who are placed on academic probation are notified of their standing via email from the Registrar's Office. Each student is required to meet with an advisor from the Advising and Enrichment Center (AEC) to complete an Academic Probation Acknowledgement and Contract for Academic Success and is further encouraged to utilize campus resources (advising, tutoring, and counseling) to improve his or her academic standing. In an effort to monitor students' academic performance during the semester, the AEC sends mid-semester progress report requests to faculty and meets with the students to discuss the results. Students on academic probation are required to visit the AEC prior to registering for classes.

The Math Resource Center provides free help with all math courses, including placement assistance, exam preparation, and background information. Patient and caring faculty from the math department provide tutorial assistance for all levels of mathematics. We deal with any anxiety you may be experiencing as well as the math concepts. Students are seen by appointment (preferred) or drop-in. For additional information, visit nyit.edu/tutoring or email math@nyit.edu.

The Science Learning Center (SLC) is designed to support students enrolled in science courses at NYIT in order to help students to perform better and excel in those courses. The objective of the SLC is to allocate additional time outside of the classroom for our students to review and enhance their understanding of the concepts discussed during lectures and/or labs. SLC is staffed by experienced teachers ready to assist students in science-related challenges and overcome the anxiety that often goes along with them. SLC provides free help for selected science courses including background concepts. For additional information, visit nyit.edu/tutoring.

The Writing Center provides tutorial assistance for all types of writing assignments and tasks. Students are encouraged to visit the Writing Center to speak with professors of English about their writing assignments. The faculty will help brainstorm for assignments, review drafts, develop ideas, and address grammar questions. For additional information, visit nyit.edu/tutoring.

The Wireless Laptop Writing Lab is an area where students can work on laptop computers to draft assignments and do research on the Internet through a wireless Internet connection. It is a quiet and comfortable space where students can spread work out on large tables or sit in cozy chairs and do work. The lab is located at the Old Westbury Writing Center in Balding House, room 100. Students may also feel free to talk to professors as they are working on assignments. For additional information, visit nyit.edu/tutoring.

Dean's List and Presidential Honor List

An undergraduate student who earns a place on the Dean's List must be a full-time matriculated student who has attained a minimum grade point average of 3.5 or higher in any semester in which he/she completed 12 or more credits without any incompletes (I), or a part- time matriculated student who has attained a minimum grade point average of 3.6 or higher in any semester in which he/she completed six or more credits without any incompletes (I). Students who meet the same standards and earn a 3.7 or above are placed on the Presidential Honor List. Notification of these awards is sent to students, and the appropriate honor is recorded on their transcripts

B.S. with Accelerated M.S. Option

The B.S. with Accelerated M.S. Option at NYIT's College of Engineering and Computing Sciences is designed for members of the Dean of Engineering Honors Program and undergraduate students who have demonstrated a consistent record of academic excellence. The B.S. with Accelerated M.S. Option program allows participants to complete both their undergraduate B.S. and graduate M.S. degrees in a total of 5 years.

- Students must have a cumulative 3.2 GPA to qualify for the program.
- Juniors in good academic standing (Dean's List) will be automatically considered for the program.
- Members of the Dean of Engineering Honors Program are guaranteed early acceptance into the B.S. with Accelerated M.S. Option program.
- B.S. with Accelerated M.S. Option-enrolled students are eligible to take 2 graduate-level courses in their senior year toward the master's program of their choice within the Engineering school, at no cost to them (as long as the 3 credits fall within the 17-credit maximum allocation).

Graduation Requirements

All students who wish to be considered as candidates for graduation must file an application for graduation with the registrar by the date indicated on the academic calendar. Applications can be completed online by accessing NYITConnect. To be eligible for graduation students must complete all program requirements to be eligible

for graduation. The following graduation guidelines will be used to evaluate students for graduation. Please note some programs have specific requirements that supersede these guidelines.

I. Criteria:

- NYIT students will be matriculated in an academic program, have all transfer credits posted to their academic record, and have all admissions and prerequisite requirements satisfied. Students will be evaluated for graduation using the program requirements in effect at the time of their most recent admission/readmission into the program. Students readmitted after a break of five years or less (undergraduates must be within 30 credits of degree completion) may request approval to follow the program requirements in place at the time of their readmission. The academic dean responsible for the program will decide in this matter. Students readmitted after a break of more than five years (undergraduates must be within 30 credits of degree completion) may request approval to follow the program requirements in place at the time of their readmission. The vice president of academic affairs (or designee) will decide in this matter. In all cases, NYSED regulations will guide these decisions.
- For most programs, the undergraduate cumulative grade point average (GPA) will be a minimum of 2.0 and the graduate cumulative GPA will be a minimum of 3.0. Some programs require a higher minimum cumulative GPA. These minimum cumulative GPA requirements cannot be waived, and NYIT does not round the cumulative GPA.
- All undergraduate courses in which the grades of A–D (inclusive of + and grades), F, WF, IF, and graduate courses with grades of A–C (inclusive of + grades) and F, WF, and IF will be used in the computation of the cumulative GPA unless a course is "major modified"** or complies with the NYIT repeat policy.
- All required and elective undergraduate courses (or approved course substitutions) must be completed with a minimum grade of D or P. Graduate courses (or approved substitutions) must be completed with a minimum grade of C or P. Courses that have specific grade requirements will be considered completed only when the required grade is achieved. Effective 2002, prior to graduation, all outstanding coursework must be completed and a grade recorded.
- To be eligible for graduation, undergraduate students must complete a
 minimum of 30 credits toward their NYIT degree. A minimum of 15 credits in
 the major must be taken in residence at NYIT. At least nine credits must be
 advanced level courses (300 or higher) in the major field of study. Graduate
 students will satisfy the residency requirements specific to the academic
 program.
- Upon satisfactory completion of program requirements, students will be awarded a certificate or degree only for the program in which he/she is

matriculated. A second certificate or degree will not be awarded for programs whose requirements are a subset of the program in which the student is matriculated. A second certificate or degree can be awarded after all program requirements for the second certificate or degree are satisfied or as specified in the NYIT catalog.

II. Distinction:

- A graduating undergraduate student who has achieved a cumulative GPA of at least 3.7 receives the baccalaureate degree summa cum laude; at least 3.5, magna cum laude; and at least 3.2, cum laude. A graduating graduate student who has achieved a minimum 3.5 cumulative GPA will graduate with distinction. Undergraduate and graduate certificate students and associate degrees are not eligible for honors. These distinctions are noted on students' diplomas as well as on their transcripts.
- Students must complete 55 percent of all coursework at NYIT. If 55 percent of
 the work was not taken at NYIT, grades for only those courses accepted as
 transfer credits from previous colleges will be computed into the cumulative
 GPA. Students must first receive at least a 3.2 GPA at NYIT before transfer
 credits are included in the cumulative average. Fifty-five percent of all college
 course grades must be in the form of letter grades from either NYIT or a
 former college. Students who do not have at least 55 percent of their credits
 in courses for which letter grades have been given are not considered for
 honors

Semester Maps

Semester Maps are an example of the semester-by-semester sequence of courses a student in the selected major might take in order to complete all the required credits. They are a useful resource for students to use for planning out their courses each semester until graduation, but are meant to serve only as a guide. All course selections must be confirmed by an advisor in your academic department. Students should choose the semester map based on the catalog year in which they were admitted to NYIT, or the year they transferred to a new major. If you are unsure which catalog year you are following, go to your Program Evaluation and look at the year following the *Catalog* section in the header.

Click here for Semester maps

Following are 2017-2018 semester maps for undergraduate programs in the College of Engineering and Computing Sciences:

COLLEGE OF ENGINEERING AND COMPUTING SCIENCES | BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING | Admitted in 2018-2019 Academic Year

YEA		MAJOR						c	ORE	TOTAL CR.
IR 1	FALL	ETCS 105 2 CAREER DISCOVERY			MATH 170 4 CALCULUS I Pre-Req: Placement exam , MATH 141, TMAT 155 or MATH 136	PHYS 170 4 GENERAL PHYSICS I Co-Req: MATH 170		FCWR 101 3 FOUNDATIONS OF COLLEGE COMPOSITION Pre-Req: Placement	FCIQ 101 3 FOUNDATIONS OF INQUIRY	16
YEAR	SPRING			CHEM 107 4 ENGINEERING CHEMISTRY I Pre-Req: TMAT 135 or MATH 135	MATH 180 4 CALCULUS II Pre-Req: MATH 170	PHYS 180 4 GENERAL PHYSICS II Pre-Req: PHYS 170 Co-Req: MATH 180		FCWR 151 3 FOUNDATIONS OF RESEARCH WRITING Pre-Req: FCWR 101	FCSC 101 3 FOUNDATIONS OF SCIENTIFIC PROCESS	18
IR 2	FALL	MENG 201 3 ENGINEERING PROGRAMMING	MENG 105 1 ENGINEERING GRAPHICS	MENG 211 3 ENGINEERING MECHANICS I (Statics) Pre-Req: PHYS 170, MATH 180	MATH 260 4 CALCULUS III Pre-Req: MATH 180	PHYS 225 3 INTRODUCTION OF MODERN PHYSICS Pre-Req: PHYS 180			FCSP 105 3 FOUNDATIONS OF SPEECH COMMUNICATION Pre-Req: FCWR 101	17
YEAR	SPRING	MENG 270 1 INSTRUMENTATION AND MEASUREMENT Pre-Req: PHYS 170	MENG 221 3 STRENGTH OF MATERIALS Pre-Req: MENG 211 & MATH 180	MENG 212 ENGINEERING MECHANICS II Pre-Req: MENG 211 Co-Req: MATH 260	MATH 320 3 DIFFERENTIAL EQUATIONS Pre-Req: MATH 260	MENG 240 3 THERMODYNAMICS Pre-Req: PHYS 225, CHEM 107		FCWR 304 3 COMMUNICATION FOR TECHNICAL PROFESSIONS**		16
YEAR 3	FALL	MENG 346 4 ENERGY CONVERSION Pre-Req: MENG 240	MENG 340 3 FLUID MECHANICS Pre-Req: MENG 240	MENG 321 3 INTRO TO COMPUTER AIDED DESIGN Pre-Req: MENG 105	EENG 211 3 ELECTRICAL CIRCUITS Pre-Req: MATH 170, PHYS 170 Co-Req: MATH 180, PHYS 180	3 LIBERAL ARTS ELECTIVE				16
YE	SPRING	MENG 310 3 INTRODUCTION TO MATERIAL SCIENCE Pre-Req: CHEM 107 OR CHEM 110	MENG 370 3 MACHINE DESIGN Pre-Req: MENG 221	MENG 324 3 VIBRATIONS AND SYSTEM Pre-Req: MENG 212, MATH 320	MENG 349 3 HEAT TRANSFER Pre-Req: MENG 240, MATH 320	IENG 240 3 ENGINEERING ECONOMICS Pre-Req: MATH 141, TMAT 155 or MATH 136	EENG 275 1 ELECTRONICS LAB Pre-Req: EENG 211 and FCWR 101			16
EAR 4	FALL	MENG 438 3 ENGINEERING ANALYSIS Pre-Req: MENG 201 and MATH 320	MENG 320 OR 343 1 Pre-Req: MENG 310, MENG 221 OR MENG 340, MENG 240		DESIGN ELECTIVE	IENG 245 3 STATISTICAL DESIGN I Pre-Req: MATH 170 OR 235		ICSS 309**+ 3 SOCIAL SCIENCE: TECHNOLOGY AND GLOBAL ISSUES	ICPH 3XX** 3 PHILOSOPHY CHOICE	17
YEA	SPRING	MENG 470 4 SENIOR MECH.ENGINEERING DESIGN Chairperson approval		3 MECHANICAL ENGINEERING ELECTIVE*	4 DESIGN ELECTIVE			ICBS 3XX** 3 BEHAVIORAL SCIENCE CHOICE	ICLT 3XX** 3 LITERATURE CHOICE	17
	DITC									_

*Mechanical Engineering Elective Options: Select 3 credits from non-required AENG, IENG, MENG or graduate MENG courses with Chairperson Approval.

+ICSS 309 is cross-listed with IENG 400

COURSE	CREDITS	PRE-REQUSITES
AENG 490	4	MENG 340
MENG 486	4	MENG 370, MENG 212
MENG 446	4	MENG 340, MENG 240, Co-Req: MENG 349
MENG 443	4	MENG 340 and MENG 349 (formerly MENG 240)

Course names, numbers and/or pre-requisites subject to change

(Rev 4/18)

^{**}Pre-Req: FCIQ 101, FCSP 105, FCSC 101, FCWR 151

DESIGN ELECTIVES (PICK 8 CREDITS FROM THE FOLLOWING)

COLLEGE OF ENGINEERING AND COMPUTING SCIENCES

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING (AEROSPACE)

Admitted in 2018-2019 Academic Year

YEA TER		MAJOR						CC	DRE	TOTAL CR.
YEAR 1	FALL	ETCS 105 2 CAREER DISCOVERY			MATH 170 4 CALCULUS I Pre-Req: Placement exam, MATH 141, TMAT 155 or MATH 136	PHYS 170 4 GENERAL PHYSICS I Co-Req: MATH 170		FCWR 101 3 FOUNDATIONS OF COLLEGE COMPOSITION Pre-Req: Placement or WRIT 100	FCIQ 101 3 FOUNDATIONS OF INQUIRY	16
YE	SPRING		MENG 105 1 ENGINEERING GRAPHICS	CHEM 107 4 ENGINEERING CHEMISTRY I Pre-Req: TMAT 135 or MATH 135	MATH 180 4 CALCULUS II Pre-Req: MATH 170	PHYS 180 4 GENERAL PHYSICS II Pre-Req: PHYS 170 Co-Req: MATH 180		FCWR 151 3 FOUNDATIONS OF RESEARCH WRITING Pre-Req: FCWR 101		16
EAR 2	FALL		MENG 201 3 ENGINEERING PROGRAMMING	MENG 211 3 ENGINEERING MECHANICS I (Statics) Pre-Req: PHYS 170, MATH 180	MATH 260 4 CALCULUS III Pre-Req: MATH 180	PHYS 225 3 INTRODUCTION OF MODERN PHYSICS Pre-Req: PHYS 180			FCSC 101 3 FOUNDATIONS OF SCIENTIFIC PROCESS	16
YEA	SPRING	MENG 270 1 INSTRUMENTATION AND MEASUREMENT Pre-Req: PHYS 170	MENG 221 3 STRENGTH OF MATERIALS Pre-Req: MENG 211 & MATH 180	MENG 212 ENGINEERING MECHANICS II Co-Req: MATH 260 Pre-Req: MENG 211,	MATH 320 DIFFERENTIAL EQUATIONS Pre-Req: MATH 260	MENG 240 3 THERMODYNAMICS Pre-Req: PHYS 225, CHEM 107		FCWR 304* 3 COMMUNICATION FOR TECHNICAL PROFESSIONS		16
33	FALL	MENG 370 3 MACHINE DESIGN Pre-Req: MENG 221	MENG 340 3 FLUID MECHANICS Pre-Req: MENG 240	MENG 321 3 INTRO TO COMPUTER AIDED DESIGN Pre-Req: MENG 105	MENG 310 3 INTRODUCTION TO MATERIAL SCIENCE Pre-Req: CHEM 107 or CHEM 110	IENG 240 3 ENGINEERING ECONOMICS Pre-Req: MATH 141, TMAT 155 or MATH 136			FCSP 105 3 FOUNDATIONS OF SPEECH COMMUNICATION Pre-Req: FCWR 101	18
YEAR	SPRING	MENG 346 4 ENERGY CONVERSION Pre-Req: MENG 240	MENG 324 3 VIBRATIONS AND SYSTEM Pre-Req: MENG 201, MENG 212, MATH 320	MENG 349 3 HEAT TRANSFER Pre-Req: MENG 240, MATH 320	EENG 211 3 ELECTRICAL CIRCUITS Pre-Req: MATH 170, PHYS 170 Co-Req: MATH 180, PHYS 180	MENG 343 1 THERMOFLUID LABORATORIES Pre-Req: MENG 340, MENG 240		ICLT 3XX* 3 LITERATURE CHOICE		17
IR 4	FALL	MENG 438 3 ENGINEERING ANALYSIS Pre-Req: MENG 201 and MATH 320		AENG 410 3 AERODYNAMICS Pre-Req: MENG 340, MATH 320	IENG 245 3 STATISTICAL DESIGN I Pre-Reg: MATH 170 OR MATH 235	EENG 275 1 ELECTRONICS LAB Pre-Req: EENG 211 and FCWR 101	3 LIBERAL ARTS ELECTIVE	ICPH 3XX* 3 PHILOSOPHY CHOICE		16
YEAR	RING	AENG 490 4 FLIGHT VEHICLE DESIGN Pre-Req: MENG 340		AENG 492 4 SENIOR AEROSPACE DESIGN Pre-Req: AENG 490, Chairperson approval	AENG 463 3 PROPULSION Pre-Req: MENG 340			ICBS 3XX* 3 BEHAVIORAL SCIENCE CHOICE	ICSS 309*+ 3 SOCIAL SCIENCE: TECHNOLOGY AND GLOBAL ISSUES	17
CRE	DITS									132

CREDITS
* Pre-Req: FCIQ 101, FCSP 105, FCSC 101, FCWR 151

+ICSS 309 is cross-listed with IENG 400 (Rev 4/18)

Course names, numbers and/or pre-requisites subject to change.

COLLEGE OF ENGINEERING AND COMPUTING SCIENCES

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY WITH CONCENTRATION IN COMPUTER SECURITY

Admitted in 2018-2019 Academic Year

EAR ERM				MAJOR				CORE		TOTAL CREDITS
FALL		ETCS 105 2 CAREER DISCOVERY		PHYSICS ELECTIVE 3	MATH 161 3 BASIC APPLIED CALCULUS Pre-Req: Placement Exam or TMAT 155, MATH 136 or MATH 141	LIBERAL ARTS 3 ELECTIVE		FOUNDATIONS OF	FCIQ 101 3 FOUNDATIONS OF INQUIRY	17
SPRING		CSCI 125 3 COMPUTER PROGRAMMING I Co-Req: MATH 136, MATH 141 or higher			3 MATH ELECTIVE	GENERAL ELECTIVE (Dept. recommends CSCI 135)		FOUNDATIONS OF	FCSC 101 3 FOUNDATIONS OF SCIENTIFIC PROCESS	15
FALL		CSCI 185 3 COMPUTER PROGRAMMING II Pre-Req: CSCI 125	CSCI 155 3 COMPUTER ORGANIZATION AND ARCHITECTURE Pre-Req: CSCI 125, CSCI 135, and MATH 161 or MATH 170	ITEC 251 3 APPLIED DISCRETE STRUCTURES 1 Pre-Req: CSCI 125, and MATH 161 or MATH 170 (Consult faculty advisor for possible substitution)	IENG 251 3 PROJECT ENGINEERING Pre-Reg: MATH 160 or MATH 161 or MATH 170				FCSP 105 3 FOUNDATIONS OF SPEECH COMMUNICATION	15
SPRING		CSCI 235 3 ELEMENTS OF DISCRETE STRUCTURES Pre-Req: CSCI 185, and MATH 161 or MATH 170	CSCI 260 3 DATA STRUCTURES Pre-Req: CSCI 180 or CSCI 185 or CSCI 210, and MATH 161 or MATH 170	ETCS 108 3 COMPUTER, INTERNET, AND SOCIETY		SCIENCE ELECTIVE		FCWR 304 3 COMMUNICATION FOR TECHNICAL PROFESSIONS Pre-Req: FCWR 151		15
FALL		CSCI 330 3 OPERATING SYSTEMS Pre-Req: CSCI 260, and CSCI 185 or CSCI 210	ITEC 290 3 DATABASE SYSTEMS Pre-Req: CSCI 260	ITEC 305 3 INTERNET PROGRAMMING I Pre-Req: CSCI 260	ITEC 320 3 WEB-BASED MULTIMEDIA DEVELOPMENT I Pre-Req: CSCI 260; Co- Req: ITEC 305			ICLT 3XX** 3 LITERATURE CHOICE		15
SPRING		CSCI 345 3 COMPUTER NETWORKS Pre-Req: CSCI 330	PROFESSIONAL 3 CONCENTRATION***		SCIENCE/ 3 TECHNOLOGY ELECTIVE Consult faculty advisor	GENERAL 3 ELECTIVE		ICBS 3XX** 3 BEHAVIORAL SCIENCE CHOICE		15
FALL		3 PROFESSIONAL CONCENTRATION***	ITEC 357 3 CISCO ACADEMY LEVEL 1 Department Approval	MGMT 421 3 CYBER LAW, POLICY AND ETHICS (MGMT 311 is an approved substitution)		GENERAL 3 ELECTIVE		PHILOSOPHY CHOICE		15
SPRING		PROFESSIONAL 3 CONCENTRATION***		SCIENCE/ 3 TECHNOLOGY ELECTIVE Consult faculty advisor	GENERAL 3 ELECTIVE	LIBERAL ARTS 3 ELECTIVE		ICSS 309**+ 3 TECHNOLOGY AND GLOBAL ISSUES Junior/Senior Status		15
	S						_			122

^{*}Non-native English speakers take FCWR 111 instead of FCWR 101 and FCWR 161 instead of FCWR 151

**Pre-Req: FCWR 101, FCWR 151, FCIQ 101, FCSP 105, FCSC 101

+ICSS 309 is cross-listed with IENG 400

d. rewk 101, rewk 151, reig 101, resp 105, rese 101											
	***PROFESSIONAL CONCENTRATION (COMPLETE 9 CREDITS FROM ONE OF THE FOLLOWING OPTIONS):										
		INFORMATION AND I	GENERAL OPTION								
COURSE	CREDITS	PRE-REQUISITES/ CO-REQUITES	COURSE CREDITS COURSE		COURSE	CREDITS	PRE-REQUISITES/ CO-REQUITES				
ITEC 310	3	CSCI 345 or CSCI 370	ITEC 445	3	ITEC 385, and CSCI 345 or CSCI 370	CSCI/ITEC ELECTIVE	3				
ITEC 365	3	ITEC 305	ITEC 450	3	APPROVAL OF CHAIRPERSON	CSCI/ITEC ELECTIVE	3	APPROVAL FROM ADVISOR			
ITEC 440	3	CSCI 345 or CSCI 370; Co- Reg: ITEC 385	ITEC 460	3	ITEC 385	CSCI/ITEC ELECTIVE	3				

Course names, numbers and/or pre-requisites are subject to change. (REV 4/18)

ENGINEERING AND COMPUTING SCIENCES | B.S. IN ENGINEERING MANAGEMENT | Admitted in 2018-2019 Academic Year

YEAR TERM					MAJOR					COR	E	TOTAL CR.
1	FALL	ETCS 105 2 CAREER DISCOVERY	Ī		MAJON		MATH 170 4 CALCULUS I Pre-Req: Placement exam, MATH 141, TMAT 155 or MATH 136	PHYS 170 GENERAL PHYSICS I Co-Req: MATH 170	4	FOUNDATIONS OF COLLEGE COMPOSITION Pre-Req: Placement exam	FCIQ 101 3 FOUNDATIONS OF INQUIRY	16
YEAR	SPRING				CHEM 107 ENGINEERING CHEMISTRY I Pre-Req: TMAT 135, MATH 135 or higher	4	MATH 180 4 CALCULUS II Pre-Req: MATH 170	PHYS 180 GENERAL PHYSICS II Co-Req: MATH 180, Pre- Req: PHYS 170	4	FCWR 151 3 FOUNDATIONS OF RESEARCH WRITING Pre-Req: FCWR 101		15
EAR 2	FALL	IENG 240 3 ENGINEERING ECONOMICS Pre-Req: TMAT 135, MATH 135 or higher math	1	IENG 245 3 STATISTICAL DESIGN I Pre-Req: MATH 170 or MATH 235	IENG 251 PROJECT ENGINEERING Pre-Req: MATH 170 or MATH 161	3	MATH 310 3 LINEAR ALGEBRA Pre-Req: MATH 180				FCSP 105 3 FOUNDATIONS OF SPEECH COMMUNICATION Pre-Req: FCWR 101	15
>	SPRING	MENG 105 1 ENGINEERING GRAPHICS		IENG 345 3 STATISTICAL DESIGN II Pre-Req: IENG 245	ACCT 101 S	3	MGMT 102 3 PRINCIPLES OF MANAGEMENT	MENG 201 ENGINEERING PROGRAMMING	3	ICBS 3XX ** 3 BEHAVIORAL SCIENCE CHOICE		16
YEAR 3	FALL	IENG 380 3 OPERATIONS RESEARCH I Pre-Req: IENG 345		PRINCIPLES OF ECONOMICS I	MRKT 102 INTRODUCTION TO MARKETING	3	FINC 201 3 CORPORATION FINANCE Pre-Req: ACCT 101, ECON 202, and TMAT 135, MATH 135 or higher math			FCWR 304** 3 COMMUNICATION FOR TECHNICAL PROFESSIONS		15
	SPRING	IENG 350 3 QUALITY CONTROL AND RELIABILITY Pre-Req: TMAT 135, MATH 135 or higher math	-	IENG 421 3 Technology & Entrepreneurship Pre-Req: IENG 251	MENG 310 INTRODUCTION TO MATERIAL SCIENCE Pre-Req: CHEM 107	3	3 TECHNICAL ELECTIVE	LIBERAL ARTS ELECTIVE	3		FCSC 101 3 FOUNDATIONS OF SCIENTIFIC PROCESS	18
4	FALL	IENG 475 3 INDUSTRIAL ENGINEERING DESIGN I*		IENG 510 3 ENERGY MANAGEMENT			3 INDUSTRIAL ENGINEERING ELECTIVE	LIBERAL ARTS ELECTIVE	3	ICSS 309**+ 3 SOCIAL SCIENCE: TECHNOLOGY AND GLOBAL ISSUES		15
YEAR	SPRING	IENG 450 3 SYSTEMS ENGINEERING & ANALYSIS Pre-Req: IENG 475	1	MGMT 370 3 ORGANIZATIONAL BEHAVIOR Pre-Req: MGMT 102			3 INDUSTRIAL ENGINEERING ELECTIVE			ICPH 3XX** 3 PHILOSOPHY CHOICE	ICLT 3XX** 3 LITERATURE CHOICE	15
CREDI	TS											125

^{*}Senior status or Chairperson Approval.

(Rev 4/18)

Course names, numbers and/or pre-requisites are subject to change.

⁺ICSS 309 is cross-listed with IENG 400

^{**} Pre – req- FCIQ 101, FCSP 105, FCSC 101, FCWR 151

COLLEGE OF ENGINEERING AND COMPUTING SCIENCES | BACHELOR OF SCIENCE IN ELECTRICAL & COMPUTER ENGINEERING | ADMITTED IN 2018-2019 ACADEMIC YEAR

YEA TER				MAJOR			MAJOR/	'CORE		TOTAL CREDITS
.R 1	FALL	ETCS 105 2 CAREER DISCOVERY			MATH 170 4 CALCULUS I Pre-Req: Placement Exam or TMAT 155, MATH 136 or MATH 141	PHYS 170 4 GENERAL PHYSICS I Co-Req: MATH 170	FCWR 101* 3 FOUNDATIONS OF COLLEGE COMPOSITION Pre-Req: Placement or WRIT 100	FCIQ 101 3 FOUNDATIONS OF INQUIRY	_	16
YEAR 1	SPRING			CSCI 125 3 COMPUTER PROGRAMMING I Co-Req: MATH 141 or higher	MATH 180 4 CALCULUS II Pre-Req: MATH 170	PHYS 180 4 GENERAL PHYSICS II Pre-Req: PHYS 170; Co-Req: MATH 180	FCWR 151* 3 FOUNDATIONS OF RESEARCH WRITING Pre-Req: FCWR 101	FCSC 101 3 FOUNDATIONS OF SCIENTIFIC PROCESS		17
IR 2	FALL	EENG 125 3 FUNDAMENTALS OF DIGITAL LOGIC	EENG 212 4 ELECTRICAL CIRCUITS I AND ENGINEERING TOOLS Pre-Req: PHYS 180 and MATH 180; Co-Req: MATH 260	CSCI 185 3 COMPUTER PROGRAMMING II Pre-Req: CSCI 125	MATH 260 4 CALCULUS III Pre-Req: MATH 180			FCSP 105 3 FOUNDATIONS OF SPEECH COMMUNICATION		17
YEAR	SPRING	EENG 270 3 INTRODUCTION TO ELECTRONICS CIRCUITS Pre-Req: EENG 212	EENG 281 3 ELECTRICAL CIRCUITS II Pre-Req: EENG 211 or EENG 212, CSCI 185; Co- Req: MATH 320	EENG 275 1 ELECTRONICS LAB I Pre-Req: EENG 211 or EENG 212 or EENG 221, and FCWR 101	CSCI 155 3 COMPUTER ORGANIZATION AND ARCHITECTURE Pre-Req: CSCI 125, CSCI 135 and MATH 161 or MATH 170	CSCI 235 3 ELEMENTS OF DISCRETE STRUCTURES Pre-Req: CSCI 185, and MATH 161 or MATH 170	MATH 320 3 DIFFERENTIAL EQUATIONS Pre-Req: MATH 260			16
IR 3	FALL	EENG 310 3 ELECTRONIC CIRCUIT APPLICATIONS Pre-Req: EENG 270; Co- Req: EENG 281	EENG 320 3 CONTROL SYSTEMS Pre-Req: EENG 260 or EENG 280 or EENG 281	EENG 315 1 ELECTRONICS LAB II Pre-Reg: EENG 270 and EENG 275	CSCI 260 3 DATA STRUCTURES Pre-Req: MATH 161 or MATH 170, and CSCI 185	CHEM 107 4 ENGINEERING CHEMISTRY I Pre-Req: TMAT 135, MATH 135 or higher	MATH 310 3 LINEAR ALGEBRA Pre-Req: MATH 180			17
YEAR	SPRING	EENG 330 3 ELECTROMAGNETIC THEORY I Pre-Req: MATH 320 and PHYS 180	EENG 341 3 SIGNALS AND SYSTEMS Pre-Req: EENG 281	EENG 360 1 ELECTRONICS LAB III Pre-Req: EENG 310, EENG 315 and FCWR 304	EENG 371 3 MICROPROCESSORS & EMBEDDED SYSTEMS Pre-Req: EENG 125 and CSCI 155	CSCI 330 3 OPERATING SYSTEMS Pre-Req: CSCI 260 and CSCI 185		ICBS 3XX** 3 BEHAVIORAL SCIENCE CHOICE		16
YEAR 4	FALL	EENG 382 3 RANDOM SIGNALS AND STATISTICS Pre-Req: EENG 340 or EENG 341	EENG 401 3 COMMUNICATION THEORY Pre-Req: EENG 340 or EENG 341; Co-Req: EENG 382	EENG 403 1 ELECTRONICS LAB IV Pre-Req: EENG 370; Co- Req: EENG 401	EENG 489 2 SENIOR DESIGN PROJECT I Pre-Req: EENG 320, EENG 330 and EENG 370; Department Consent Required	PHYS 225 3 INTRODUCTION TO MODERN PHYSICS Pre-Req: PHYS 180	FCWR 304 3 COMMUNICATION FOR TECHNICAL PROFESSIONS Pre-Req: FCWR 151	ICLT 3XX** 3 LITERATURE CHOICE		18
YE,	SPRING	MENG 211 3 ENGINEERING MECHANICS I (STATICS) Pre-Req: PHYS 170 and MATH 180	EENG 491 2 SENIOR DESIGN PROJECT II Pre-Req: EENG 401 and EENG 489; Department Consent Required		ELECTRICAL/ COMPUTER SCIENCE ELECTIVE Department Approval Required	3 LIBERAL ARTS ELECTIVE	ICSS 309**+ TECHNOLOGY AND GLOBAL ISSUES Junior or Senior Status	ICPH 3XX** 3 PHILOSOPHY CHOICE		17
CRE	DITS									134

*Non-native English speakers should take FCWR 111 in lieu of FCWR 101 and FCWR 161 in lieu of FCWR 151.

**Pre-Req: FCWR 101, FCWR 151, FCIQ 101, FCSP 105, FCSC 101

(Rev 4/18)

⁺ICSS 309 is cross-listed with IENG 400

COLLEGE OF ENGINEERING AND COMPUTING SCIENCES

BACHELOR OF SCIENCE IN ELECTRICAL & COMPUTER ENGINEERING TECHNOLOGY | Admitted in 2018-2019 Academic Year

YE.				MAJOR				CORE		TOTAL CREDITS
IR 1	FALL		ETEC 110 4 ELECTRICAL TECHNOLOGY I Co-Req: TMAT 135 or MATH 135		MATH 135 4 FUNDAMENTALS OF PRECALCULS I Pre-Req: Placement Exam or MATH 101		FCWR 101* 3 FOUNDATIONS OF COLLEGE COMPOSITION Pre-Req: Placement or WRIT 100	FCIQ 101 3 FOUNDATIONS OF INQUIRY	FCSC 101 3 FOUNDATIONS OF SCIENTIFIC PROCESS	17
YEAR	SPRING	ETCS 105 2 CAREER DISCOVERY	ETEC 120 4 ELECTRICAL TECHNOLOGY II Pre-Req: ETEC 110; Co- Req: TMAT 155 or MATH 136	ETEC 131 4 ELECTRONICS TECHNOLOGY I Pre-Req: ETEC 110; Co- Req: ETEC 120	MATH 136 4 FUNDAMENTALS OF PRECALCULS II Pre-Req: Placement Exam TMAT 135 or MATH 135		FCWR 151* 3 FOUNDATIONS OF RESEARCH WRITING Pre-Req: FCWR 101			17
R 2	FALL	CTEC 204 3 PROGRAMMING TECHNIQUES I Pre-Req: TMAT 135, MATH 135 or MATH 141	CTEC 216 4 DIGITAL ELECTRONICS Pre-Req: ETEC 130 or ETEC 131	ETEC 231 4 ELECTRONICS TECHNOLOGY II Pre-Req: ETEC 131	MATH 161 3 BASIC APPLIED CALC. Pre-Req: Placement Exam, TMAT 155, MATH 136 or MATH 141	PHYS 130 3 INTRO PHYSICS Pre-Req: TMAT 135 or MATH 135				17
YEAR	SPRING	PROGRAMMING TECHNIQUES II Pre-Req: CTEC 204 or CTEC 205	CTEC 243 3 APPLIED COMPUTATIONAL ANALYSIS I Pre-Req: MATH 161	CTEC 241 4 CIRCUIT DESIGN AND FABRICATION Pre-Req: ETEC 131, and CTEC 215 or CTEC 216		PHYS 150 3 INTRO PHYSICS II Pre-Req: PHYS 130			FCSP 105 3 FOUNDATIONS OF SPEECH COMMUNICATION	16
R3	FALI	CTEC 235 4 MICROCOMPUTERS I Pre-Req: ETEC 131 and CTEC 216	CTEC 247 3 APPLIED COMPUTATIONAL ANALYSIS II Pre-Req: CTEC 243	ETEC 310 4 COMMUNICATION CIRCUITS Pre-Req: ETEC 231 and MATH 161		SCIENCE or LIBERAL ARTS ELECTIVE Consult faculty advisor	FCWR 304 3 COMMUNICATION FOR TECHNICAL PROFESSIONS Pre-Req: FCWR 151			17
YEAR	RIN	CTEC 336 4 EMBEDDED SYSTEMS & IOT Pre-Req: CTEC 206, CTEC 235	CTEC 350 3 MICRO- CONTROLLER BASED SYSTEMS Pre-Req: CTEC 235	IENG 240 3 ENGINEERING ECONOMICS Pre-Req: TMAT 155, MATH 136 or higher	APPLIED STATISTICS Pre-Req: MATH 161, CTEC 243		ICBS 3XX** 3 BEHAVIORAL SCIENCE CHOICE			16
4	FALL	ETEC 495 3 SENIOR DESIGN Pre-Req: two courses from CTEC 350 or CTEC 430 or CTEC 460 or ETEC 420 or ETEC 470		IENG 251 3 PROJECT ENGINEERING Pre-Req: MATH 160 or MATH 161 or MATH 170	3 CTEC/ETEC ELECTIVE***	3 CTEC/ETEC ELECTIVE***	ICPH 3XX** 3 PHILOSOPHY CHOICE			15
YEAR		ETEC 410 4 CONTROL SYSTEMS TECHNOLOGY Pre-Req: CTEC 216 or CTEC 225, and ETEC 230 or ETEC 231, and CTEC 246 or CTEC 247			3 CTEC/ETEC ELECTIVE***	3 LIBERAL ARTS ELECTIVE Consult faculty advisor	ICLT 3XX** 3 LITERATURE CHOICE		ICSS 309/ IENG 400**+ TECHNOLOGY AND GLOBAL ISSUES Junior or Senior Status	16

CREDITS

(REV: 4/18)

131

*Non-native English speakers should take FCWR 111 in lieu of FCWR 101 and FCWR 161 in lieu of FCWR 151.

Course names, numbers and/or pre-requisites are subject to change.

^{***}CTEC/ETEC Electives with Senior Status, Chairperson Approval (choose 9 credits from the following):
COURSE CREDITS PRE-REQUISITES COURSE CREDITS PRE-REQUISITES PRE-REQUISITES
CTEC 235 COURSE CREDITS ETEC 231, PHYS 150 CTEC 460 ETEC 470 CTEC 471 CTEC 204 or CTEC 205 ETEC 490 Chairperson Approval Chairperson Approval ETEC 240 ETEC 120 ETEC 420 MTEC 210 **CTEC 430** CTEC 335

^{**}Pre-Req: FCWR 151, FCIQ 101, FCSP 105, FCSC 101

⁺ICSS 309 is cross-listed with IENG 400

COLLEGE OF ENGINEERING AND COMPUTING SCIENCES | BACHELOR OF SCIENCE IN COMPUTER SCIENCE | ADMITTED IN 2018-2019 ACADEMIC YEAR

YEA TERI				MAJOR			COF	RE	TOTAL CREDITS
IR 1	FALL	ETCS 105 2 CAREER DISCOVERY			MATH 170 4 CALCULUS I Pre-Req; Placement Exam or TMAT 155, MATH 136 or MATH 141	NATURAL 3 SCIENCE ELECTIVE ***	FCWR 101* 3 FOUNDATIONS OF COLLEGE COMPOSITION Pre-Req: Placement or WRIT 100	FCIQ 101 3 FOUNDATIONS OF INQUIRY	15
YEAR	SPRING	CSCI 125 3 COMPUTER PROGRAMMING I Co-Req: MATH 141 or higher			MATH 180 4 CALCULUS II Pre-Req: MATH 170	NATURAL 4 SCIENCE ELECTIVE ***	FCWR 151* 3 FOUNDATIONS OF RESEARCH WRITING Pre-Req: FCWR 101	FCSC 101 3 FOUNDATIONS OF SCIENTIFIC PROCESS	17
2	FALL	CSCI 185 3 COMPUTER PROGRAMMING II Pre-Req: CSCI 125	CSCI 135 DIGITAL LOGIC DESIGN FUNDAMENTALS Pre-Req: MATH 136 or MATH 141 or higher		MATH 310 3 LINEAR ALGEBRA Pre-Req: MATH 180	NATURAL 4 SCIENCE ELECTIVE ***	FCSP 105 3 FOUNDATIONS OF SPEECH COMMUNICATION		16
YEAR	SPRING	CSCI 260 DATA STRUCTURES Pre-Req: MATH 161 or MATH 170, and CSCI 185	CSCI 235 3 ELEMENTS OF DISCRETE STRUCTURES Pre-Req: CSCI 185, and MATH 161 or MATH 170	CSCI 155 3 COMPUTER ORGANIZATION AND ARCHITECTURE Pre-Req: CSCI 125, CSCI 135 and MATH 161 or MATH 170	ETCS 108 3 COMPUTER, INTERNET AND SOCIETY		FCWR 304 3 COMMUNICATION FOR TECHNICAL PROFESSIONS Pre-Req: FCWR 151		15
IR 3	FALL	CSCI 330 3 OPERATING SYSTEMS Pre-Req: CSCI 260, and CSCI 185	CSCI 270 3 PROBABILITY AND STATISTICS FOR CS Pre-Req: MATH 180, and CSCI 235	CSCI 312 3 THEORY OF COMPUTATION Pre-Req: CSCI 235 or CSCI 325	CSCI 318 3 PROGRAMMING LANGUAGE CONCEPTS Pre-Req: CSCI 260		ICLT 3XX** 3 LITERATURE CHOICE		15
YEAR	SPRING	CSCI 335 3 DESIGN AND ANALYSIS OF ALGORITHMS Pre-Req: CSCI 260	CSCI 345 3 COMPUTER NETWORKS Pre-Req: CSCI 330	CSCI 300 3 DATABASE MANAGEMENT Co-Req: CSCI 260		MATH/SCIENCE 3 ELECTIVE	ICBS 3XX** 3 BEHAVIORAL SCIENCE CHOICE		15
4	FALL	CSCI 380 3 INTRODUCTION TO SOFTWARE ENGINEERING Pre-Req: CSCI 260	COMPUTER 3 SCIENCE CONCENTRATION *Department Approval	COMPUTER 3 SCIENCE CONCENTRATION *Department Approval		MATH/SCIENCE 3 ELECTIVE	ICPH 3XX** 3 PHILOSOPHY CHOICE		15
YEAR	SPRING	CSCI 455 3 SENIOR PROJECT Department Consent Required. Limited to Seniors	COMPUTER 3 SCIENCE CONCENTRATION *Department Approval	COMPUTER 3 SCIENCE CONCENTRATION *Department Approval		GENERAL 3 ELECTIVE	ICSS 309** 3 TECHNOLOGY AND GLOBAL ISSUES Junior or Senior Status Cross-listed with IENG 400		15
CREI	DITS								121-123

*Non-native English speakers should take FCWR 111 in lieu of FCWR 101 and FCWR 161 in lieu of FCWR 151. **Pre-Req: FCWR 101, FCWR 151, FCIQ 101, FCSP 105, FCSC 101

***	Natural Science Options: Choose one		Computer Science Concentrations: Select one concentration and complete 12 credits				
Option I Option II Option III		Big Data Management and Analytics	Network Security	General Option			
PHYS 170 General Physics I	CHEM 110 General Chemistry I	BIOL 110 General Biology I	CSCI 436 Big Data Analytics (required*)	CSCI 352 Intro to Network and Internet Security	Choose four		
PHYS 180 General Physics II	CHEM 150 General Chemistry II	BIOL 150 General Biology II	CSCI 426 Information Retrieval	CSCI 354 Principles of Information Security	CSCI/ITEC 300-		
Life Science Elective: Biology or	Physics Elective (3 credits)	Physics Elective (3 credits)	CSCI 401 Database Interfaces and	CSCI 357 CISCO Academy Level 1	400 level courses		
Chemistry (3 credits)			Programming	CSCI 362 Info. System Security Engineering & Admin			
			CSCI 405 Distributed Database Systems	CSCI 440 Network Security & Perimeter Protection			
			CSCI 415 Introduction to Data Mining	CSCI 445 Operating System Security			
				CSCI 460 Special Topics I			
				CSCI 470 Special Topics II	(rev 5/18)		

MINORS

NYIT offers eight minors available to all undergraduates:

- Energy Science, Technology, and Policy
- Graphic Design
- Health Sciences
- Health Services Administration
- Mathematics
- Medical Humanities
- Psychology
- Technical & Professional Communication

In order to declare a minor, students must complete an <u>Application to</u> <u>Declare Undergraduate Minor</u> form and secure the chairperson's signature. For more information: <u>Minors</u>

The Minor in Energy Science, Technology, and Policy enables students to develop "green skills" in their chosen field. Many employers seek to reduce their carbon footprint and promote cleaner, more efficient technologies that are less harmful to the environment.

COLLEGE OF ENGINEERING AND COMPUTING SCIENCES

Curriculum Requirements for Minor in Energy Science,

Technology, and Policy Minor Requirements

Required Courses:

Credits:		
IENG 122	Energy Science and Technology	3
ETCS 105	Career Discovery	2
IENG 285	Energy Technology Project	3
ETCS 365	Engineering & Computing Sciences Internship	1
IENG 590	Energy Policy, Economics, and Technology	3

Total: 12 credits

Elective Courses (choose one):

G at 15th		
Credits:		
BIOL 107	Environmental Sciences	3
PHYS 156	Environmental and Energy Issues	3
ICSS 309	Technology and Global Issues	3
IENG 510	Energy Management	3

Total: 3 credits

Total Required Credits: 15

College of Engineering and Computing Sciences Clubs

ACM – Association for Computing Machinery (Old Westbury and Manhattan) ACM, the world's largest educational and scientific computing society, delivers resources that advance computing as a science and a profession. ACM provides the computing field's premier Digital Library and serves its members and the computing profession with leading-edge publications, conferences, and career resources. © acm_nyitow f facebook.com/acm.nyit.ma f facebook.com/acm.nyit.ow @ acm_nyitow ACM@nyit.edu ACMOW@nyit.edu

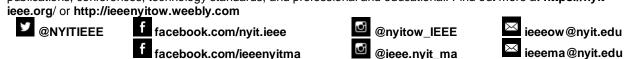
ASME - The American Society of Mechanical Engineers (Old Westbury)

ASME is a worldwide organization with over 130,000 members, including over 20,000 student members in more than 150 countries. ASME student members gain skills and practical experience outside the classroom; connect with professional engineers in their area of interest; get access to hundreds of key resources that will open doors when they start their professional career.



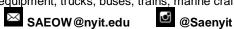
IEEE - Institute of Electrical and Electronic Engineers (Old Westbury and Manhattan)

IEEE is the world's largest professional association dedicated to advancing technological innovation and excellence for the benefit of humanity. IEEE and its members inspire a global community through IEEE's highly cited publications, conferences, technology standards, and professional and educational. Find out more at https://nyitieee.org/cr/http://ieee.puitow.weehb.com



SAE - Society of Automotive Engineers (Old Westbury)

SAE International is a professional organization for mobility engineering professionals in the aerospace, automotive, and commercial vehicle industries. The Society is a standards development organization for the engineering of powered vehicles of all kinds, including cars, trucks, boats, aircraft, and others. SAE is the premiere would resource for the design, manufacturing, operation, and maintenance of automobiles, aircraft, space vehicles, off-highway equipment, trucks, buses, trains, marine craft, engines, and self-propelled vehicles.



NSBE - National Society of Black Engineers (Old Westbury and Manhattan)

The National Society of Black Engineers (NSBE), with more than 35,700 members, is one of the largest student-governed organizations in the country. NSBE's mission is "to increase the number of culturally responsible black engineers who excel academically, succeed professionally and positively impact the community." NSBE strives to accomplish the following objectives with their organization: Stimulate and develop student interest in the various engineering disciplines, increase the number of students studying engineering, encouraging members to seek advanced degrees and to obtain professional engineering registrations. The organization serves to promote public awareness of engineering and the opportunities for Blacks and other minorities in that profession.

awareness of engineering	and the opportunities for Blacks and o	ther <u>min</u> orities in that prof
@NSBE_nyitow	f facebook.com/nsbe-nyit-ow	☑ @NSBE_nyitow
@NYITNSBE	•	@nyitnsbe

SWE - Society of Women Engineers (Old Westbury and Manhattan)

SWE is the driving force that establishes engineering as a highly desirable career aspiration for women. SWE empower women to succeed and advance in those aspirations and be recognized for their life-changing contributions and achievements as engineers and leaders. SWE has over 21,000 members in nearly 100 professional sections and 300 student sections throughout the United States.

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@nyitow_swe	facebook.com/nyitswe	@nyitowswe	\bowtie
@swenyitma	f facebook.com/swenyitma	@swenyitma	swemanhattan@nyit.edu



Babak D. Beheshti, Ph.D. Interim Dean College of Engineering and Computing Sciences

College of Engineering and Computing Sciences

UNDERGRADUATE (B.S.)

Computer Science with Concentrations in:

- Network Security
- Big Data Management and Analytics

Electrical and Computer Engineering

Information Technology with Option in:

- Information and Network Security

Dr. F. Lee, Chair (CS/IT) Dr. Y. Saito, Chair HSH, Rm 218, LI EGGC, Rm 806, NYC 516.686.7456 212.261.1650 gli@nyit.edu ysaito@nyit.edu

Dr. A. Farajidavar, Chair (ECE Only)

HSH, Rm 217, LI 516.686.4014 afarajid@nyit.edu

Mechanical Engineering

Mechanical Engineering with Option in:

- Aerospace Engineering

Engineering Management

Dr. X. Yu, Chair HSH, Rm 115, LI 516.686.7829 xyu13@nyit.edu

Electrical and Computer Engineering Technology

Prof. L. Amara, Chair EGGC, Rm 812, NYC 212.261.1644 lamara@nyit.edu

GRADUATE (M.S.)

Computer Science

Electrical and Computer Engineering

Information, Network, and Computer Security

Data Science

Dr. F. Lee, Chair
HSH, Rm 218, LI
516.686.7456
fli@nyit.edu

Dr. Y. Saito, Chair
EGGC, Rm 806, NYC
212.261.1650
ysaito@nyit.edu

Mechanical Engineering

Dr. X. Yu, Chair HSH, Rm 115, LI 516.686.7829 xyu13@nyit.edu

Energy Management

Dr. R. Amundsen, Director HSH, Rm 224A, LI 516.686.7578 ramundse@nyit.edu

Environmental Technology and Sustainability

Dr. D. Nadler, Chair HSH, Rm 226C, LI 516.686.1373 dnadler@nyit.edu

Bioengineering

Dr. A. Farajidavar, Director HSH, Rm 217, LI 516.686.4014 afarajid@nyit.edu