Electrical and Computer Engineering Technology
New Student Information Packet

Welcome,

Congratulations on your acceptance to New Jersey Institute of Technology and the Electrical and Computer Engineering Technology (ECET) Program. This packet contains essential information for your success as an ECET student. Please read this packet in its entirety; it answers many common questions about the program and will save you valuable time in the future. Many of your communications in the future will require the protocol set forth in this packet.

Sincerely,

[Signature]

Professor Daniel Brateris
ECET Program Coordinator
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The Engineering Technology Department

The Engineering Technology Department is located in the on the second floor in suite 2100 of the Guttenberg Information Technologies Center (GITC) at NJIT. Building number 28 on the NJIT Campus Map below.
Website
The ECEE website contains valuable information for all ECET students. The website is located within the Engineering Technology website.

Engineering Technology:  http://engineeringtech.njit.edu
ECET Program:  http://engineeringtech.njit.edu/academics/ecet.php

Administration
The ECET Program is an option within the Engineering Technology Department. The administration of the program is shared among Engineering Technology support staff and the program coordinator.

Chair
Professor Ronald Rockland
Phone:  973.642.7155
Email:  rockland@njit.edu

Program Coordinator
Professor Daniel Brateris
Phone:  973.596.6510
Email:  brateris@njit.edu

Assistant to the Chair
Edna Randolph
Phone:  973.596.3228
Email:  edna.m.randolph@njit.edu

Administrative Assistant
Marcia Eddings
Phone:  973.596.3650
Email:  marcia.eddings@njit.edu
**Academic Advising**

All advising for the ECET program is performed in person and through appointment only by the ECET program coordinator. To schedule an appointment with your academic advisor please visit the ECET homepage at: [http://engineeringtech.njit.edu/academics/ecet.php](http://engineeringtech.njit.edu/academics/ecet.php) and click the link to “Schedule an Appointment”.

**Program of Study**

The ECET program of study is an ABET accredited Engineering Technology program. All students are required to take and pass a predetermined course of study to obtain their ECET degree from NJIT. The complete ECET Program of Study is located on the last page of this document.

Courses in the program are divided into three categories: required courses, electives, and general university requirements.

**Required Courses**

Major tract required courses for the ECET program cover a majority of the technical content in the degree. These courses cover material focusing on electrical engineering, computer programming and architecture, mechanical design, physics, chemistry, math and other related subject matters.

**General University Requirements (GUR)**

General university requirements are courses outside of the major tract courses, which are required by the university for all students. These courses cover general education, humanities, history, writing, economics, and English.

**Electives**

The ECET program has a total of eight electives, three are required at the 200 or higher level and five are required at the 300 or higher level. The electives are divided into three categories: free electives, technical electives, and ECET electives.

**Free Electives**

Free electives may be satisfied by any course offered at the university. The ECET program contains two free electives, one at the 200 or higher level and one at the 300 or higher level.

**Technical Electives**

Technical electives can be satisfied only by courses with a technical subject matter; this excludes humanities, history, economics, social sciences, literature, and any other non-technical subject. Math and the sciences are considered technical subjects. The ECET program contains four technical electives: two at the 200 or higher level and two at the 300 or higher level.
Technical subjects which are valid for technical electives are: the sciences, engineering, engineering technology, computer science, management information systems, and information technology.

**ECET Electives**

ECET electives are 300 and 400 level courses offered by the ECET program that are not previously required courses. All ECET students are required to take at least two of these courses. ECET elective courses taken in addition to the two required satisfy any elective requirement.

The ECET program has a variety of ECET electives; a brief list of these courses is presented below:

- ECET 350 Computerized Industrial Controls (PLC)
- ECET 412 Power Generation and Distribution
- ECET 415 Fundamentals of Telecommunications
- ECET 416 Networking Applications
- ECET 418 Transmission Systems
- ECET 444 Technology Applications of Object-Oriented Programming

**Co-Op Work Experience (Internship)**

Co-Op Work Experience is not required as part of the ECET program, although it is highly recommended. Students can participate in a sixteen-week paid internship at a variety of local companies. Students who pass Co-Op can use the credit to fulfill any of the six non-ECET electives.

To apply for Co-Op students must first visit the Career Development Services office at NJIT and fill out a Co-Op application. The application will be sent to your academic advisor for approval and you will be notified of the decision.

**Career Development Services**

Career Development Services  
**Campus Address:** 323 Martin L. King Blvd  
Campbell Hall, 4th & 5th Floors  
University Heights  
Newark, NJ 07102  
**Phone:** (973) 596-3227  
**Website:** [http://www.njit.edu/cds/](http://www.njit.edu/cds/)  
**Main Contact:** Alexia Jones

**Co-Op Classes**

The ECET Co-Op classes are ECET 395 and ECET 495. Students may take up to two Co-Op courses; however only the first Co-Op counts for course credit towards a degree. ECET 395 is three credits. ECET 495 is zero credits and is used for a students second Co-Op.
**Senior Project**
The ECET program culminates with a two-semester project sequence comprised of Senior Project 1 (ECET 401) and Senior Project 2 (ECET 402).

**Senior Project 1**
Senior Project 1 is an intensive study in product development and design. Students cultivate an original idea for an electronic or electromechanical product, which is preapproved for sufficient technical complexity by the instructor. Throughout the semester students are guided through system engineering, social, and economic considerations to complete a rigorous study in product development. The course is concluded with delivery of technical and management plans for the design and construction of a functioning prototype.

**Senior Project 2**
Senior Project 2 is the implementation of the design developed in Senior Project 1. Students work to build a functioning prototype throughout the semester, concluding with a professional presentation and technical critique of the design and implementation.

**Applying for Senior Project 1**
Registration for Senior Project 1 is restricted to students who are considered seniors within the ECET program; this is more restrictive than being considered a senior academically by the university. To be considered a senior within the ECET program a student must be able to graduate from program in no more than two semesters (upon completion of Senior Project 2, which must be taken the semester after Senior Project 1).

Students must apply to take Senior Project 1. If accepted a registration permit will be issued to allow the student to register. To apply for Senior Project you must use the online Senior Project Application. Once you have submitted the request, schedule an appointment with your academic advisor. During the appointment, your advisor will preform a preliminary graduation check. If you are accepted into Senior Project 1 your advisor will issue you a permit to register for Senior Project 1. There is no alternative method for completion of this requirement.

**Registering for Senior Project 2**
If you have taken and passed Senior Project 1 you will automatically be issued a permit to register for Senior Project 2. If registration opens and you are not able to register for Senior Project 2, request a registration permit for ECET 402 through the Engineering Technology Support System.

**Freshmen**
Freshmen who enter the ECET program should register for all courses listed in the fall semester column of the freshman year on the ECET Program of Study. If math placement prevents you from registering for Math 138, register for the remedial math course you were assigned. Then proceed to register for Math 138 in the nearest winter or summer session.
Prior to registration schedule a meeting with your academic advisor as soon as possible. Do not wait, advising is by appointment only and is first come first served. This is the only way to have your academic advisor hold removed. See the Advising section for instructions on scheduling an appointment. As a new student you must meet with your academic advisor prior to the start of the semester.

If your academic advisor does not have an available appointment till after the semester begins or you are comfortable with registering for the ECET freshman classes outlined in the Program of Study, submit a request to have your hold removed using the Engineering Technology Support System.

**Transfer Students (From other institutions)**

Transfer students who enter the ECET program should check that all transfer credits have successfully transferred to NJIT. This may take up to two weeks. Log on to the Highlander Pipeline and view your academic transcript. Your transfer courses should have been transferred and should appear at the top of your transcript.

If you transferred from a New Jersey community college engineering technology program, all credits from the program should be accurately transferred as equivalent NJIT courses. To determine your position in the ECET program fill in the courses you have transfer credit for in the ECET program of study. Then register for classes for which you have not yet completed. Register for available ECET classes first, as they fill up quickly and are the most restrictive. Before registering you must submit a request to have your advisor hold removed using the Engineering Technology Support System.

If courses you transferred do not appear on your transcript contact your academic advisor and verify that they have the most recent copy of your transcript. If your transcript is missing ET or ECET courses schedule a meeting with your academic advisor, they will assist you with transferring and evaluating ET courses. If courses from other departments are missing on your transcript, for example, if a math course has not transferred, then you must visit the math department. The ET department cannot transfer or evaluate courses that are not ET courses.

Additionally, as a new student at NJIT you must meet with your academic advisor within your first semester. Schedule and keep an appointment to meet with your academic advisor. Do not wait until the end of the semester to schedule an appointment, appointments are limited and fill up quickly.

**Transfer Students (With WES credits)**

World Education System credits must be individually evaluated. Please make an appointment to meet with your academic advisor. During the appointment your advisor will review your academic records and evaluate your transfer credits.
The Engineering Technology Support System

All ECET support is conducted through the Engineering Technology Support System. If you need support for any one of the following issues, you must submit a support request through the system.
- Course Registration Permit Requests
- Advisor Hold Removal Requests
- Senior Project Application
- Graduation Application Signature Requests

The Support System is located under the Students section on the Engineering Technology Homepage. [http://engineeringtechnology.njit.edu](http://engineeringtechnology.njit.edu)

Academic Standing

Academic standing is how the university rates your academic progress. For a full description of academic standing please see the University Guidelines on Academic Policies and Procedures located at: [http://catalog.njit.edu/undergraduate/frontmatteracademicpoliciesproc.php](http://catalog.njit.edu/undergraduate/frontmatteracademicpoliciesproc.php)

Calculation of Grade Point Average

\[
\text{Quality Points} = \text{Grade Points} \times \text{Credit Hours}
\]

\[
\text{Grade Point Average} = \frac{\text{Total Quality Points}}{\text{Total GPA Hours}}
\]

Grade Points

<table>
<thead>
<tr>
<th>Grades</th>
<th>GPA</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
<td>Excellent</td>
</tr>
<tr>
<td>B+</td>
<td>3.5</td>
<td>Good</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td>Acceptable</td>
</tr>
<tr>
<td>C+</td>
<td>2.5</td>
<td>Marginal Performance</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
<td>Minimum Performance</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
<td>Minimum Performance</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
<td>Failure</td>
</tr>
<tr>
<td>I</td>
<td></td>
<td>Incomplete</td>
</tr>
<tr>
<td>W</td>
<td></td>
<td>Approved Withdrawal</td>
</tr>
<tr>
<td>AUD</td>
<td></td>
<td>Audited</td>
</tr>
<tr>
<td>A or U</td>
<td></td>
<td>Satisfactory</td>
</tr>
<tr>
<td>P</td>
<td></td>
<td>Pass</td>
</tr>
</tbody>
</table>

Registration

NJIT has an advance self-registration system that obligates all students currently enrolled in undergraduate degree programs to register in advance for their courses. Registration is
required each semester for courses offered in the next academic session (fall, winter, spring, summer). Students are advised according to the curriculum for their major, as outlined in the degree program listing in the undergraduate catalog. Students are required to meet with their academic advisor prior to registration; an advisor hold on registration will be removed with advisor authorization only.

All students register online via Campus Pipeline (http://my.njit.edu). An approved registration guarantees class seats until the first class meeting. Students who do not attend the first class meeting may lose their place in class.

**Course Schedules**

Course schedules for current and future semesters are available on the website for the Registrar at [http://www.njit.edu/registrar/](http://www.njit.edu/registrar/).

**Advising Holds**

To ensure students regularly see their academic advisor for assistance; every semester every student at NJIT has an advisor hold placed on their account. This hold will prevent you from registering for classes. To remove this hold you must meet with your academic advisor or submit a Course Approval Form. If your account has a hold from any other department, such as a bursar hold, you must speak with the corresponding department to have the hold removed. Engineering Technology cannot remove holds placed on your account by any other office or department.

**Course Approval Forms**

All students must submit a course approval form every semester to have their advisor hold removed. If you are unsure what courses to take you may wish to meet with your academic advisor to discuss this. Course approval forms are submitted online; visit the ET Student Homepage at: [http://engineeringtech.njit.edu/students](http://engineeringtech.njit.edu/students) and click the link for Course Approval Form.

**Course Registration Permits**

The online registration system may prevent students from registering for a particular class for a variety of reasons, most commonly, time conflicts, major restrictions, year restrictions, or missing pre-requisites. Occasionally the system has errors or you may have a valid reason that you should be let into a restricted class, in this case you must request a permit to override the restriction.

Course permits must be issued from the same department or program as the course. For example, the ECET program can only issue permits for ECET classes, and cannot issue registration permits for any classes that are not ECET.

Closed course permits are generally not issued for ECET courses. The only valid reason for a closed course permit to be issued is if the semester is your last semester before graduation and the course is required for your degree.
Accommodation for Disabilities

The Coordinator of Student Disability Services will coordinate the provision of appropriate accommodations and/or academic adjustments on a case-by-case basis for students with disabilities, who identify themselves, provide adequate documentation of their disability, need for accommodation, request services, and complete appropriate forms. Appropriate accommodations are provided at no cost to the student.

If you have any questions or would like additional information, please contact:

Center for Counseling and Psychological Services (C-CAPS)
Campus Address: 323 Martin L. King Blvd
                        Campbell Hall, Entry level
                        University Heights
                        Newark, NJ 07102
Phone: 973.596.3420
Website: http://www.njit.edu/counseling/services/disabilities.php
Main Contact: Dr. Phyllis Bolling

NJIT Photo ID Card

ID cards, available at ID Office, corner of Summit and Warren Streets, should be carried at all times while on campus for identification purposes. ID cards must be presented to NJIT Public Safety Officers upon request. ID cards are required to receive special campus services (i.e. library, gym, labs, etc.) and access to certain buildings. You will need proof of registration to obtain an ID card.

Parking

Commuters need to obtain a parking pass to park in NJIT lots. You can purchase a semester pass at the ID Office, corner of Summit and Warren Streets. Check the link: http://www.njit.edu/parking.

Important Contacts

<table>
<thead>
<tr>
<th>Department</th>
<th>Location</th>
<th>Phone</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bursar’s Office</td>
<td>Student Mall</td>
<td>973.596.3148</td>
<td>njit.edu/bursar/</td>
</tr>
<tr>
<td>Counseling Center</td>
<td>Campbell Hall</td>
<td>973.596.3420</td>
<td>njit.edu/counseling/</td>
</tr>
<tr>
<td>Dean of Students Office</td>
<td>Campus Center</td>
<td>973.596.3466</td>
<td>njit.edu/doss/</td>
</tr>
<tr>
<td>Department of Chemistry</td>
<td>Tiernan Hall</td>
<td>973.596.3568</td>
<td>chemistry.njit.edu</td>
</tr>
<tr>
<td>Department of Humanities</td>
<td>Cullimore Hall</td>
<td>973.596.3266</td>
<td>humanities.njit.edu</td>
</tr>
<tr>
<td>Department of Mathematics</td>
<td>Cullimore Hall</td>
<td>973.596.5782</td>
<td>math.njit.edu</td>
</tr>
<tr>
<td>Division of Career Services</td>
<td>Campbell Hall</td>
<td>973.596.3643</td>
<td>njit.edu/cds/</td>
</tr>
<tr>
<td>Learning Center</td>
<td>Kupfrian Hall</td>
<td>973.596.3461</td>
<td>njit.edu/tlc/</td>
</tr>
<tr>
<td>Office of the Registrar</td>
<td>Student Mall</td>
<td>973.596.3236</td>
<td>njit.edu/registrar</td>
</tr>
<tr>
<td>Office of Health Services</td>
<td>Phys Ed Building</td>
<td>973.596.3621</td>
<td>njit.edu/healthservices/</td>
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### Electrical and Computer Engineering Technology Program of Study

<table>
<thead>
<tr>
<th>Lower Division Courses</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Freshman Seminar</td>
<td>3.00</td>
<td>Preparatory Seminar (1.0-0)</td>
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<td>Preparatory Seminar</td>
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<tr>
<td>Writing: Thinking, Speaking II</td>
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<tr>
<td>General Physics I</td>
<td>3.00</td>
<td>Preparatory Seminar (1.0-0)</td>
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| Junior Division Courses (33 Credits) |
|-------------------------------------|---------|------------|
| Technical Writing | 3.00 | Preparatory Seminar (1.0-0) |
| Technical Writing | 3.00 | Preparatory Seminar (1.0-0) |
| Technical Writing | 3.00 | Preparatory Seminar (1.0-0) |
| Technical Writing | 3.00 | Preparatory Seminar (1.0-0) |

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<tr>
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<tr>
<td>Technical Writing</td>
<td>3.00</td>
<td>Preparatory Seminar (1.0-0)</td>
</tr>
</tbody>
</table>

### General Elective Hours

- Any 200+ level course with a technical subject matter. Suggestions: CPT courses (excluding CPT 310), PHYS, IT, CS, MATH, IS. These courses must be taken at NJIT.
- Cap. Seminar: (300+)
- Chemistry (2 credit)
- Chemical Technology (2 credit)