Check your course schedule for room numbers and your professor’s name and email. Your professor may change your lab location. If you want to see when sections are scheduled, use the Rowan Section Tally @ “banner.rowan.edu/reports/reports.pl?task=Section_Tally”. Select the current term, then select the College (of Engineering) and Department (ENGR - Engineering) and click the Search button.

Required Texts & Supplies (Available at Rowan Barnes & Noble Bookstore in Glassboro or Online. Binder, paper, & lab notebook can be purchased at any store selling school supplies)
- “Freshman Engineering 1 ETxtbk”: Show receipt to Instructor to maintain access to your web-book
- Medium 3-ring binder for your portfolio
- Engineering Paper for Homework, e.g., Engineer’s Computation Pad, Ampad Corporation
- Laboratory notebook w/ identically numbered perforated carbonless transfer pages that create copies as you write. There is one associated with the FEC I or Chem I at B&N, but any suitable laboratory notebook is fine.

PathFinder Web-book
Your textbook is a web-book you access online on PathFinder (pathfinder.rowan.edu:88). An email will help you log in and get your web-book. PathFinder web-books include online Quizzes and HW. Complete quizzes BEFORE material is covered in class (yes, we expect you to read the web-book!); complete HW AFTER material is covered in class. Check out the FAQ on the Help Tab in your web-book to learn about PathFinder. There is a short learning curve.

Group Schedule (Meet in Rowan Hall Auditorium during laboratory session)
- Week of August 30 – Course Introduction
- Week of September 6 – Library Skills
- Week of September 27 – Movie: TBD
- Week of October 18 – Movie: TBD
Engineering Clinic I Objectives

Objective 1: Measurements
- Apply appropriate sensors and instrumentation to make measurements of physical quantities
- Collect, analyze, and interpret data; form and support conclusions
- Know and apply measurement unit systems and conversions. Understand significant figures and uncertainty.

Objective 2: Engineering Professions
- Describe the engineering disciplines
- Explain the functions of the Engineer
- Understand the function of the members of a technology team

Objective 3: Teamwork
- Work effectively in teams with individual and joint accountability
- Assign roles, responsibilities and tasks
- Monitor progress, meet deadlines, and integrate individual contributions into a final deliverable

Objective 4: Problem Solving
- Apply the Scientific Problem-Solving Method to solve engineering problems
- Present the problem and its solution in standard engineering format
- Demonstrate independent thought, creativity, and critical thinking in real-world problem solving

Objective 5: Communication
- Communicate effectively about laboratory work with a specific audience both orally and in writing
  - Technical reports, memos, laboratory notebooks
  - Graphical representation of data
  - Appropriate use of significant figures; estimations
  - Oral presentations
- Demonstrate appropriate and effective business communication skills via e-mail and oral communications with faculty.

Objective 6: Design Process
- Devise a system, component, or process using the Ten Step Design Process

Objective 7: Safety / Professionalism / Ethics
- Recognize health, safety, and environmental issues related to technological processes and deal with them responsibly.
- Demonstrate high ethical standards in all academic activities and assignments, including data collection and reporting, reports, exams, and homework assignments.

---

Rowan Seminar
All Rowan Freshman take a Rowan Seminar. Freshman Engineering Clinic is your Rowan Seminar. The Rowan Seminar Objectives are:

Objective 1: Writing and critical thinking skills
- See Engineering Clinic Objectives 4 and 5 above

Objective 2: Library research skills
- Identify and locate library holdings
- Distinguish between scholarly journals and popular press
- Select appropriate electronic databases to obtain scholarly and popular articles
- Use information from a library resource appropriately in written and oral reports.

Objective 3: Cooperative Learning
- Work on structured tasks in a small group to support the learning of one self and others in the group

Objective 4: Classroom management skills
- Develop personal learning strategies for course material and reflect on level of success
- Develop effective methods of organization and time-management
- Use effective test-taking strategies

Banner
Banner is an online entity students use to register for classes and more. A training guide is available at http://www.rowan.edu/provost/registrar/forms/StudentSelfService.pdf.

Computer Usage
The engineering computer skills developed in this course involve the use of software programs for word processing (Word), spreadsheet calculations and charting (Excel), and presentation delivery and drawing schematics (PowerPoint). Other software may be introduced at the discretion of your instructor. MATLAB is introduced in FEC II.

Lectures and Labs
This course consists of both seminar/lecture and laboratory sessions (days vary depending on your session). On lecture days you will meet with your section instructor in the room shown in your schedule. On your lab day, you will meet with your section’s professor to work on your semester project(s), multiple-section meetings, presentations, etc.

All work is due at the beginning of the class period and should be presented in a professional manner. It is your responsibility to turn in the homework at the beginning of class without prompting from the professor.
Active Learning
Active learning is expected in this course. To make this possible, you are expected to prepare for class by reading web-book chapters and completing BEFORE exercises before concepts are covers in lectures.

Portfolio
It will be beneficial for you to maintain a portfolio of course handouts and your work, which will help you to learn and review the material presented in this course. You are required to compile a portfolio in a 3-ring binder of all materials for this class that you will submit at the end of the semester for a final grade.

Quizzes (Surprise or Announced)
May be given at the discretion of section instructor.

Midterm and Final Exams
Exams may be open or closed book/notes, at the discretion of your professor. The format and length of the midterm exam will be determined by each section instructor. A two-hour final exam will be scheduled during finals week.

Grading
This course is only offered for grade credit, which is determined by evaluating work performed in the following areas:

<table>
<thead>
<tr>
<th>Laboratory Sessions including:</th>
<th>45%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance and participation</td>
<td></td>
</tr>
<tr>
<td>Reports</td>
<td></td>
</tr>
<tr>
<td>Presentations</td>
<td></td>
</tr>
<tr>
<td>Professionalism and ethics</td>
<td></td>
</tr>
<tr>
<td>Seminar/Lecture Sessions, including:</td>
<td>30%</td>
</tr>
<tr>
<td>In-class assignments and quizzes</td>
<td></td>
</tr>
<tr>
<td>Homework</td>
<td></td>
</tr>
<tr>
<td>Professionalism and ethics</td>
<td></td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>10%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>10%</td>
</tr>
<tr>
<td>Portfolio</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>
Extra Credit

*Student and Professional Engineering Societies:* An excellent method to gain insight into a field of engineering is to attend engineering student club and engineering professional society meetings. Appropriate Rowan Groups are described in the course web-book. You will receive 0.5 points per meeting added to your final grade, up to a total of 3 points during the semester. To obtain credit for attending a student meeting you must document your attendance. Your section’s professor will select one of two methods:

- a) The online event submittal webpage of the Rowan Seminar Passport Program (include a selfie taken at the meeting that includes an officer, faculty member, or relevant white board)
- b) The **Extra Credit Form** (included in this Syllabus), including a signature from a faculty member or club officer in attendance AT THE MEETING.

To expand your knowledge of all engineering fields, you are encouraged to attend meetings of engineering clubs outside of your chosen engineering discipline; however, you may attend the meetings of a given club multiple times. Check e-mail, websites, Facebook, and bulletin boards in Rowan Hall to find out about meetings.

Cooperative Learning

You are encouraged to work in teams, with members teaching each other valuable skills and knowledge. Cooperative learning is further described in the course web-book.

Safety

Safety is of critical importance. You will receive rules and guidelines that must be followed. Failure to follow safe laboratory practices can lead to accidents that can endanger you and other students. *Your grade will be reduced if you fail to follow proper safety procedures.*

Professionalism & Ethics

You will be expected to behave professionally, and your conduct will be considered in the final determination of your grade. Many people including your fellow employees, community and family rely on your professional decisions and actions. Your work should place the highest value on safety. In addition, engineers are expected to consider the ethical and environmental consequences of their actions. The practice of professionalism will be divided into the three areas of safety, attendance, and ethics.

Attendance Policy

Attendance is required, since a substantial amount of material is presented for which no texts are available and many of the laboratories and in-class exercises will be conducted in teams. In addition to classes, you are expected to attend all scheduled team meetings.

Habitual late arrival or absence from class is unprofessional and unacceptable. You will receive credit for attendance in class only if you are **present at the start** of the class period. If you know that you will be absent from class for a valid reason, obtain approval from your instructor before the class period (ideally, 24 hours before). The only exception is a medical emergency.
Academic and Work Conduct
Your ability to work effectively with your coworkers (classmates) and team leaders and managers is being formulated through your university experience. If you contribute creatively and effectively to the workload of your team in homework and laboratory assignments, and studying for quizzes and the exams, then you will be successful in your academic endeavors. If you are careless in your work, you will struggle to succeed in the real world.

Your academic success is important. If you have a documented disability that may have an impact upon your work in this class, please contact me. Students must provide documentation of their disability to the Academic Success Center in order to receive official University services and accommodations. The Academic Success Center can be reached at 856-256-4234. The Center is located on the 3rd floor of Savitz Hall. The staff is available to answer questions regarding accommodations or assist you in your pursuit of accommodations. We look forward to working with you to meet your learning goals.

The policy in this class in matters of academic misconduct will follow that stated in the Academic Integrity Policy (www.rowan.edu/provost/policies/AcademicIntegrity.htm). Students who commit an act of academic dishonesty are subject to disciplinary sanctions up to and including expulsion from the university.
FAQ

Q: Who are my advisors?
A: Your Engineering Advisors are one of your most important college resources. You have general and discipline-specific advisors. Your general advisor is Maria Perez-Colon (Rowan Hall, Room 105A, perezcolon@rowan.edu, 856.256.5302). Your first-year discipline-specific advisor is someone (usually a professor) who can talk with you about academic, industry & career issues related to your major. Check out the “RU Introduction” chapter in your FEC I web-book for more details.

Q: How do I get to see my advisors?
A: Call or email and request an appointment.

Q: What if I need advising quickly and my advisor is not available?
A: See your Freshman Engineering Clinic I professor, who will either answer your question or direct you to the appropriate person. However, they are busy, so see your general or discipline-specific advisors if possible!

Q: Is it OK to drop a course if I am doing poorly or don’t like it?
A: Not until you have talked to an advisor about it!! The engineering curriculum is very tightly scheduled and dropping a course may cause you many headaches trying to catch up. There are ways to reschedule courses but you and your advisor should devise a plan for rescheduling if you need to drop something. So, PLEASE see your advisor before you drop a course.

Q: How do I address members of the faculty and staff?
A: The accepted form of address in public or formal situations is Ms. LAST_NAME for a woman or Mr. LAST_NAME for a man. If you know that a person is a member of the faculty, then you should use either Doctor LAST_NAME or Professor LAST_NAME. Sometimes people use an administrative title, for instance, our deans could be addressed as Dr. Lowman or Dean Lowman and Dr. Chin or Dean Chin. This usually does not extend to the administrative title “Chair”, the chairpersons should be addressed as Dr. or Prof. The technical and administrative staff in the laboratories and offices are addressed as Ms. or Mr.

The only exception to the above standards is when a person specifically requests that you call them something else. If you do not know a person’s last name then ma’am or sir – even though they sound a little too formal – are appropriate. The person will usually tell you their name and appreciate your consideration.

Q: Is it OK to walk into a faculty-person’s office if the door is open?
A: NO. Always knock and wait to be acknowledged. The person may be in the middle of a task and not have time to talk to you – it’s much less embarrassing to be asked to come back than to be chased out! If a faculty member has scheduled office hours – honor them – if you can’t make those times, make an appointment!

Q: Where can I find a stapler to staple my homework with before I turn it in?
A: There are two staplers in the first floor computer lab, near each printer.
Q: Whom should I go to if I am having trouble with the computers?
A: There are several levels of resources to use here:
   a. There are computer lab monitors are in the 1st floor PC lab
   b. Try the main Information Resources & Technology website: https://irt.rowan.edu/display/IRT/Home
   c. Try talking to the instructor of the course that you are working on
   d. Send an email message to support@rowan.edu, and ‘cc’ your course instructor, if you are having difficulty with computers in the College of Engineering

Q: How do I check my email?
A: Use the Campus Web Portal: http://cp.rowan.edu/

Q: Can I still use my old Yahoo (or AOL, Hotmail, etc.) email account?
A: Yes, BUT – it is YOUR responsibility to set up email forwarding from your campus email address to the account you want to use. Most faculty will only send email to your Rowan-issued email address.

Q: Where are the faculty mailboxes?
A: The faculty all have mailboxes in Rowan Hall room 212 – let the secretaries know that you have something that you wish to leave for a certain faculty member – they will direct you.

Q: How do I get an internship for next summer?
A: Ms. M. Basantis is the internship coordinator. See the RU Introduction chapter in your web-book for more information.

Q: How do I contact Rowan Professors and Staff?
A: The professor/staff listing is at http://www.rowan.edu/colleges/engineering/faculty_staff/listing/.

Other Resources
Campus map – www.rowan.edu/campus_map/index.html
**Freshman Clinic**  
**Extra Credit Form**

To obtain 0.5 points of extra credit for attending a student meeting you must complete a section of this form (or use Passport if your professor allows). Print a second copies if you attend more than three meetings. You can obtain up to 3 points added to your final grade. **ALL of the fields must be completed for each meeting attended. Return this form to your professor at the end of the semester.** Check email and social media to find out about meetings.

<table>
<thead>
<tr>
<th>Name of Organization/Society</th>
<th>Date</th>
<th>Topic of Meeting</th>
<th>Signature of Faculty Advisor or Student Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of Organization/Society</th>
<th>Date</th>
<th>Topic of Meeting</th>
<th>Signature of Faculty Advisor or Student Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of Organization/Society</th>
<th>Date</th>
<th>Topic of Meeting</th>
<th>Signature of Faculty Advisor or Student Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Rowan Engineering Computer Resources

Rowan Hall Lab:

<table>
<thead>
<tr>
<th>1st Floor: Room 131</th>
<th>Windows 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday-Friday</td>
<td>8:00AM – 10PM. (8PM, Fri)</td>
</tr>
<tr>
<td>Sat-Sun</td>
<td>12:00PM – 5:00 PM</td>
</tr>
</tbody>
</table>

Usernames and Passwords:
*Username*: The name before @ in your e-mail address. Example: If your e-mail address is “peters43@students.rowan.edu”, then your username is “peters43”, without the quotes.

*Password*: The first time you log in your password is your birthdate: MMDDYY

Example: April 3, 1990 would be: 040390

To change your password, go to: [https://id.rowan.edu/](https://id.rowan.edu/)

Access your files from home: [https://irt.rowan.edu/display/IRT/Access+from+Anywhere](https://irt.rowan.edu/display/IRT/Access+from+Anywhere)

Set up your laptop for wireless:
[https://confluence.rowan.edu/display/IRT/ClearPass+Registration](https://confluence.rowan.edu/display/IRT/ClearPass+Registration)

**Rowan Hall Printers:** There are 2 printers in Room 131, labeled: 131-A and 131-B. The first 750 pages (per year) are Free.
- Send your documents to the printer
- Walk over to the kiosk system located next to the printer
- Swipe your student ID in order to release your print job.
- If you want to send a print job from outside campus to Rowan printers:
  [https://irt.rowan.edu/display/IRT/On+Campus+Printing](https://irt.rowan.edu/display/IRT/On+Campus+Printing)

**Computer Help in Rowan Hall:**
Walk in 3Rd. Floor, room 324, Help Desk is: (856)256-5383
E-Mail support@rowan.edu
Phone 856-256-4400

**Rowan Cloud:** [https://irt.rowan.edu/display/IRT/RowanCloud+and+Citrix](https://irt.rowan.edu/display/IRT/RowanCloud+and+Citrix)
- Available on computers in the open lab.
- Available from home and from anywhere you can get an Internet connection.
- You can use laptops, tablets, smart phones to use engineering applications.

**Roaming Profile:** You can customize your desktop to your liking. Change the resolution, change background and add your favorite shortcuts. That desktop will follow you wherever you log in on campus.

**Student Campus Portal:** [http://cp.rowan.edu/cp/](http://cp.rowan.edu/cp/

**Other Resources:** [https://confluence.rowan.edu/display/IRT/Resources+for+Students](https://confluence.rowan.edu/display/IRT/Resources+for+Students)