



**Fall 2019**

**Introduction to Engineering**

**EGR\*K111, CRN-32536**

*Class Hours:* Monday & Wednesday: 1:30 – 2:45 pm

*Class Location:* D107

*Class Textbook:* Introduction to Engineering Analysis, 4<sup>th</sup> Edition, by Kirk Hagen

*Instructor:*

Name: Mark Vesligaj  
Office: C128  
Office Hours: Monday from 12:30 – 1:30 pm **AND** 5:00 – 6:00 pm  
Wednesday from 4:15 – 5:15 pm ...  
...or by appointment. **Please set appointments in advance.**  
Phone: 860 215 9442 (office)  
Email: [mvesligaj@trcc.commnet.edu](mailto:mvesligaj@trcc.commnet.edu) (preferred contact method)

*Prerequisite:* Intermediate Algebra (MAT\*137)

**Course Description:**

Students will be introduced to the fields of engineering through design and graphics and comprehensive engineering projects. Topics include sketching, charts, graphs, forces, energy, electrical circuits, mechanisms, materials testing, manufacturing technologies and fundamentals of engineering economics.

**Course Goals:**

- Understand different types of engineering fields and their functions
- Understand the research process through case studies and technical journals
- Demonstrate data acquisition and documentation skills
- Understand and implement the design process
- Demonstrate basic problem solving techniques for engineering systems
- Understand team-based project work for engineering problems
- Demonstrate an awareness of pathways to engineering majors/ careers

**Course Participation:**

Active learners succeed. It is essential in an exploratory course such as this one to participate and evaluate the material. Additionally, attendance is required for participation to engage your classmates and enable a dynamic interaction in class.

Finally, students will practice the skills needed to work effectively in teams and as an individual. All members of teams will be expected to contribute and will be peer evaluated.

**Special Needs:**

Any student in the class who may have special needs should feel free to contact me. I am interested in any situation which may impact your ability to be successful in this course. If you are a student with a disability and you believe you will need accommodations for this class, it is your responsibility to please contact one of the college's Disability Service Providers (DSP) as soon as possible. Please note that accommodations cannot be provided until you provide written authorization from a DSP.

For more information, contact Advising and Counseling at 860-215-9017.

**Digication:**

All students are required to maintain an online learning portfolio in Digication that uses the college template. Through this electronic tool students will have the opportunity to monitor their own growth in college-wide learning. The student will keep his/her learning portfolio and may continue to use the Digication account after graduation. A Three Rivers General Education Assessment Team will select and review random works to improve the college experience for all. Student work reviewed for assessment purposes will not include names and all student work will remain private and anonymous for college improvement purposes. Students will have the ability to integrate learning from the classroom, college, and life in general, which will provide additional learning opportunities. If desired, students will have the option to create multiple portfolios.

**Class Cancellation:** In case of inclement weather, check the college website for class cancellations or call 860-215-9000 for recorded message.

**MyCommNet Alert:** *MyCommNet* is a system that sends text messages and emails to anyone signed up in the event of a campus emergency. Additionally, TRCC sends messages when the college is delayed or closed due to weather. All students are encouraged to sign up for *MyCommNet* Alert. A tutorial is available on the Educational Technology and Distance Learning Students page of the web site.  
[http://www.trcc.commnet.edu/div\\_it/educationaltechnology/Tutorials/myCommNetAlert/MIR3.html](http://www.trcc.commnet.edu/div_it/educationaltechnology/Tutorials/myCommNetAlert/MIR3.html)

**BOARD OF REGENTS FOR HIGHER EDUCATION AND CONNECTICUT STATE COLLEGES AND UNIVERSITIES POLICY REGARDING SEXUAL MISCONDUCT REPORTING, SUPPORT SERVICES AND PROCESSES POLICY**

**Statement of Policy for Public Act No. 14-11: An Act Concerning Sexual Assault, Stalking and Intimate Partner Violence on Campus:**

“The Board of Regents for Higher Education (BOR) in conjunction with the Connecticut State Colleges and Universities (CSCU) is committed to insuring that each member of every BOR governed college and university community has the opportunity to participate fully in the process of education free from acts of

sexual misconduct, intimate partner violence and stalking. It is the intent of the BOR and each of its colleges or universities to provide safety, privacy and support to victims of sexual misconduct and intimate partner violence.”

**United States Department of Education and Office of Civil Rights Title IX Statement of Policy:**

“Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination based on sex in education programs and activities in federally funded schools at all levels. If any part of a school district or college receives any Federal funds for any purpose, all of the operations of the district or college are covered by Title IX.

Title IX protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination, including discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. All students (as well as other persons) at recipient institutions are protected by Title IX – regardless of their sex, sexual orientation, gender identity, part-or full-time status, disability, race, or national origin-in all aspects of a recipient’s educational programs and activities.”

If any student experiences sexual misconduct or harassment, and/or racial or ethnic discrimination on Three Rivers Community College Campus, or fears for their safety from a threat while on campus, please contact:

Maria Krug, Title IX Coordinator OR Ken Saad, Equity & Diversity Officer  
Three Rivers Community College  
574 New London Turnpike, Norwich CT 06360

(860) 215-9208, [MKrug@trcc.commnet.edu](mailto:MKrug@trcc.commnet.edu)

OR

(860) 215-9319, [KSaad@trcc.commnet.edu](mailto:KSaad@trcc.commnet.edu)

**Academic Integrity:** Academic integrity is essential to a useful education. Failure to act with academic integrity severely limits a person's ability to success in the classroom and beyond. Furthermore, academic dishonesty erodes the legitimacy of every degree awarded by the College. In this class and in the course of your academic career, present only your own best work; clearly document the sources of the material you use from others; and act at all times with honor.

**Withdrawal:** A student who finds it necessary to discontinue a course must complete a "Withdrawal Request Form" available in the Registrar's office within the time limits of the semester calendar. Students who do not withdraw, but stop attending will be assigned an "UF" which may impact their financial aid status. The last day to withdraw from classes can be found on the Academic Calendar the college website.

**Homework:** There will be regular homework assignments for this course. The assignments will be checked, collected, and/or reviewed during class. Additionally, much of the homework will be reading assignments which will match the sequencing of lectures and topics for the semester. It is up to the student to keep pace with the material. Homework

submitted late (turned in one class late max) is subject to a late penalty (-20%). All homework is due on Mondays.

**Design Project:** There will be a team-based project.

**Presentation:** There will be a final presentation in place of a final exam.

**Tooling-U\*:** There will modules / courses assigned throughout the semester. Each student will be responsible for completing the modules / courses, assessments, and feedback review form.\*

**Grading:** Your final grade in this course will be determined as follows:

Homework	50%
Design Project	20%
Presentation & Tooling-U	30%
<b>Total</b>	<b>100%</b>

*\*Pending successful grant award. If not awarded / processed in time, the Presentation will be the full 30% of weighing in your final grade calculation (otherwise, each will be 15%).*

### **Grading Equivalents:**

Your final letter grade will be determined according to the following equivalents:

A: 93 – 100, A-: 90 – 92

B+: 87 – 89, B: 83 – 86, B-: 80 – 82

C+: 77 – 79, C: 73 – 76, C-: 70 – 72

D+: 67 – 69, D: 63 – 66, D-: 60 – 62

F: below 60