FLORIDA ATLANTIC UNIVERSITY

NEW COURSE PROPOSAL
Graduate Programs

Department lectrical Engineering and Computer Science

College Engineering and Computer Science

(*To obtain a course number, contact* ***erudolph@fau.edu***)

UGPC Approval _____
UFS Approval _____
SCNS Submittal _____
Confirmed _____
Banner _____
Catalog _____

Prefix CEN **Number** 6055	*(L = Lab Course; C = Combined Lecture/Lab; add if appropriate)* **Lab Code**	**Type of Course** Lecture	**Course Title** Software Engineering Project Mangement

Credits *(See Definition of a Credit Hour)*
3

Effective Date *(TERM & YEAR)*
Spring 2025

Grading *(Select One Option)*
Regular ◯
Sat/UnSat ◯

Course Description *(Syllabus must be attached; see Template and Guidelines)*
This course will utilize the experience of the instructor, industry professionals and in class activities to demonstrate the benefits of effective software engineering project management. Industry professionals will share experience and engage with students so that students obtain a greater understanding of the real-world requirements for effective management of software engineering projects.

Prerequisites
graduate standing

Prerequisites, Corequisites and Registration Controls are enforced for all sections of course.

Academic Service Learning (ASL) course ☐
Academic Service Learning statement must be indicated in syllabus and approval attached to this form.

Corequisites

Registration Controls *(For example, Major, College, Level)*

Minimum qualifications needed to teach course:
Member of the FAU graduate faculty and has a terminal degree in the subject area (or a closely related field).

List textbook information in syllabus or here

Faculty Contact/Email/Phone
Michael DeGiorgio / mdegiorg@fau.edu / 561-297

List/Attach comments from departments affected by new course

Approved by	***Date***
Department Chair Hai Kalva	08/21/2024
College Curriculum Chair Masoud Jahandar Lashaki	08/21/2024
College Dean Raquel Assis	08/21/2024
UGPC Chair	08/26/2024
UGC Chair	08/26/2024
Graduate College Dean	08/26/2024
UFS President	
Provost	

Email this form and syllabus to UGPC@fau.edu 10 days before the UGPC meeting.

CEN 6055
Software Engineering Project Management

DAY X – X
3 credits

Semester, Year
Prof. XXXXX YYYYY
Office: XXXXXX
Office hours: DAY X-X
Classroom: XXXX
Telephone: 561-297-XXXX
Email: zzzzz@fau.edu

TA name	xxxxxx xxxxxxxxx
Office	xxxxxxxx
Office hours	DAY xx:xx – xx:xx
Telephone	561-297-xxxx
Email	xxxxxx@fau.edu

Course Description
This course will utilize the experience of the instructor, industry professionals and in class activities to demonstrate the benefits of effective software engineering project management. Industry professionals will share experience and engage with students so that students obtain a greater understanding of the real-world requirements for effective management of software engineering projects.

Instructional Method
In-Person. There is no remote option for this course.

Prerequisites
Graduate standing

Course Objectives/Student Learning Outcomes
Upon successful completion of this course, students will understand:

- Leading some engineering project management methodologies including Waterfall, Agile, and SAFe
- The concept of critical path and slack
- Change Control
- Risk Management
- Quality Control techniques
- Project requirements evaluation
- Project team structure, roles and responsibilities
- Understand principles and different types of Agile Project Management
- Understand DevOps, Agile Software Engineering, Architecture

- Understand real world applications of project management
- Understand project management tools including Microsoft Project and Atlassian Suite

Course Evaluation Method

Mini project 1	20%
Mini project 2	20%
In-class activities	20%
Industry professional reflections	20%
Final project	20%
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Total	100%

For each industry professional presentation students will provide the following:

- Restate both questions and answers from Industry Professionals
- One paragraph, five to six sentences on what the student has learned

Course Grading Scale

Grade	Total (%)
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	[0 – 59)

Policy on Makeup Tests, Late Work, and Incompletes

Late work will not be accepted. All assignments will be posted well in advance, and students may submit assignments early. Any assignment not turned in by the due date will result in a zero.

Incomplete grades are against the policy of the department, and they will only be assigned if there is solid evidence of medical or otherwise serious emergency situation.

Policy on the Recording of Lectures

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental

to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct and/or the Code of Academic Integrity.

Attendance Policy

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to http://www.fau.edu/counseling/

Disability Policy

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Code of Academic Integrity

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.

Required Texts/Readings

Readings will derive from a number of sources, which will be distributed on Canvas as needed.

Course Topical Outline

Week 1
Cover Class Curriculum
Meet the students
What is a project, program, and portfolio?
What is project management.
Software Engineer Role in Project Management Project
Management Types & Certifications

Week 2
Business Cases
Different ways of justifying / measuring value
Charter / Vision / Mission
How Teams are Formed
Team Stages
Project manager types

Week 3
PMP – overview
PMP - Identify stakeholders
Scope to WBS
Activities to schedule
Resources to budget

Week 4
PMP - Identify stakeholders
Scope to WBS
Activities to schedule
Resources to budget
Artificial Intelligence in Project Management

Week 5
Critical Path, Slack
MS Project
Managing Change within a Waterfall Project
Status Reports

Week 6
Agile – overview, history, manifesto, principles
Agile – Team Size, Roles
Forms of Agility
Scrum Master, Product Owner, Team Members
Welcoming Change within an Agile Project
Agile Ceremonies Agile Tooling: JIRA and GitHub

Week 7
Agile – KANBAN

Week 8
Agile – SAFe (Scaled Agile Framework)

Week 9
Software Architects Role in Project Management
Cybersecurity In Project Management
Risk Management, Compliance, Policy and Procedure Management, Vulnerability Management, Security Project Management, and Knowledge Management
Project Requirements Evaluation

Week 10
Risk Mitigation
Quality
Six Sigma
DEVOPs

Week 11
Agile Software Engineering
Lean UX
One on Ones
Cybersecurity In Project Management
Risk Management, Compliance, Policy and Procedure Management, Vulnerability Management, Security Project Management, and Knowledge Management

Week 12
What motivates teams, people?
What motivates business owners?
One on Ones

Week 13
Vendor Management
One on Ones

Week 14
Final Class Project – Software Engineering Project Management Tools

RE: New Courses from EECS

Tamara Dinev <tdinev@fau.edu>

Thu 8/22/2024 3:30 PM

To:Waseem Asghar <wasghar@fau.edu>
Cc:Hari Kalva <hkalva@fau.edu>;Mihaela Cardei <mcardei@fau.edu>

Hello Waseem:

ITOM has no objections on creating the new courses.

Best Regards:
Tamara
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Tamara Dinev, Ph.D.
Department Chair and Professor
Dean's Distinguished Research Fellow
Department of Information Technology and Operations Management, FL 219
College of Business, Florida Atlantic University
Boca Raton, Florida 33431
Google Scholar: https://scholar.google.com/citations?user=YH8QZ-YAAAAJ&hl=en

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From: Waseem Asghar <wasghar@fau.edu>
Sent: Tuesday, April 9, 2024 4:13 PM
To: Tamara Dinev <tdinev@fau.edu>
Cc: Hari Kalva <hkalva@fau.edu>; Mihaela Cardei <mcardei@fau.edu>
Subject: RE: New Courses from EECS
Importance: High

Dear Dr. Dinev,
Hope you are doing well. The Department of Electrical Engineering and Computer Science (EECS) has the following three new courses that we are developing to include in our graduate course offerings.

CIS5645_IntroductionToCloudSecurity
CEN6091_AdvancedSoftwareEngineeringInPractice
CEN6055_SoftwareEngineeringProjectManagement

We are looking for your review and approval for these courses. Please see the attached syllabus and let us know if you have any questions.

Thank you
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Regards,
Waseem Asghar, Ph.D.,
Associate Professor, Director of Graduate Programs
Department of Electrical Engineering and Computer Science,
Department of Biological Sciences (Courtesy Appointment),
Florida Atlantic University,
777 Glades Road, EE 96/Rm 435, Boca Raton, FL 33431
Ph: 561.297.3728
Fax: 561.297.2800
http://faculty.eng.fau.edu/asghar/

Engineering CEN 6055

Final Audit Report 2024-08-26

Created:	2024-08-26
By:	Christine Kraft (kraftc@fau.edu)
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Transaction ID:	CBJCHBCAABAAXz7E3A6MgcDNsb0nRY6LfwU30MMIZCzU

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