# **Cover Sheet: Request 14211**

# **Engineering Project Management Certificate (Undergraduate)**

#### Info

Process	Certificate New Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	William Mcelroy mcelrowj@eng.ufl.edu
Created	9/9/2019 11:00:14 AM
Updated	3/11/2020 9:41:29 AM
Description of	A new undergraduate certificate in Engineering Project Management has been created by the
request	Engineering Leadership Institute in the Herbert Wertheim College of Engineering. The certificate
	is expected to be popular and will provide students with fundamental knowledge, skills and
	applications in a competency that is common through wide sectors in the practice of engineering.

# Actions

Step	Status	Group	User	Comment	Updated			
Department	Approved	ENG - Engineering - General 011940001	Johannes Van Oostrom	Approved at the 10/18/19 EED Curriculum Committee Meeting	10/22/2019			
		sesCertificate8.28.			9/9/2019			
College	Approved	ENG - College of Engineering	Heidi Dublin	Approved by the HWCOE Curriculum Committee and the HWCOE Faculty Meeting on 12/6	12/6/2019			
No document c	hanges							
Office of Institutional Planning and Research		PV - Office of Institutional Planning and Research	Cathy Lebo	Please change CIP to 14.2701 for systems engineering. UF is approved at the bachelor's level for this CIP.	2/4/2020			
No document c								
Office of Institutional Planning and Research	Approved	PV - Office of Institutional Planning and Research	Cathy Lebo		2/5/2020			
No document c	hanges							
Associate Provost for Undergraduate Affairs		PV - Associate Provost for Undergraduate Affairs	Casey Griffith		2/6/2020			
No document c		I <b></b>						
University Curriculum Committee		PV - University Curriculum Committee (UCC)	Lee Morrison	Added to the March agenda. If approved, this will go into effect for the Summer B 2020 term with the publication of the 2020-2021 undergraduate catalog.	3/11/2020			
EPM Certificate					3/5/2020			
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			3/11/2020			
No document changes								
Office of the Registrar								
No document c OIPR Notified	hanges							

Step	Status	Group	User	Comment	Updated		
No document changes							
Student							
Academic							
Support							
System							
No document c	No document changes						
Catalog							
No document changes							
Academic							
Assessment							
Committee							
Notified							
No document changes							
College							
Notified							
No document changes							

## Certificate|New for request 14211

#### Info

Request: Engineering Project Management Certificate (Undergraduate)

**Description of request:** A new undergraduate certificate in Engineering Project Management has been created by the Engineering Leadership Institute in the Herbert Wertheim College of Engineering. The certificate is expected to be popular and will provide students with fundamental knowledge, skills and applications in a competency that is common through wide sectors in the practice of engineering.

Submitter: William Mcelroy mcelrowj@eng.ufl.edu

Created: 2/5/2020 7:04:00 AM

Form version: 5

## Responses

#### **Certificate Name**

Enter the name of the certificate. Example: Urban Pest Management.

Response:

**Engineering Project Management** 

### **Transcript Title**

Enter the transcript title of the certificate. This is limited to 50 characters, including spaces.

Response:

**Engineering Project Management** 

#### **Credits**

Enter the total number of credit hours needed to complete the certificate program.

Response:

9

#### Level

Enter the program level of the certificate.

Response:

Baccalaureate

#### **CIP Code**

Enter the six digit Classification of Instructional Programs (CIP) code for the degree program associated with the proposed certificate. The code has the numerical format XX.XXXX. Contact the Office of Institutional Planning and Research (OIPR) to verify the CIP code for the existing degree program.

Response:

14.2701

#### **Degree Program**

Enter the degree program associated with the CIP code entered above (e.g. Accounting).

Response:

#### Engineering

#### **Effective Term**

Enter the term (semester and year) that the certificate would start. Please keep in mind that this may be adjusted depending on University deadlines for approval process.

Response: Summer

#### **Effective Year**

Response: 2020

### **Certificate Description**

Enter a description of the certificate. This is limited to 50 words or fewer.

#### Response:

Engineering students receiving the certificate will maintain competencies aligned with a common career path in private and public organizations. The two core courses include fundamentals of engineering project, combined with engineering economy. Optional 3rd courses aligning with the certificate will be available through various departments, or to all students.

#### Requirements for Admission

List any requirements for admission to this new certificate program such as grade point average, background in the discipline, current enrollment status, etc.. Please indicate if the certificate only accepts students of a particular status: for example, current UF graduate students, graduate students in a specific college, non-degree seeking students, or any student status.

#### Response:

The certificate is open to all current junior and senior level engineering students.

#### **Requirements for Completion**

List all of requirements for completion of the certificate program, such as courses, internships, projects, etc. For each course, indicate prefix, number, title, # credits, and established grading scheme (letter grade or S/U). The title should be identical to the official title of the course as listed in the <u>Graduate</u> catalog or <a href="http://gradcatalog.ufl.edu/">Graduate</a> catalog.

### Response:

Grades of B or better must be obtained in all the certificate-based courses (that are all existing courses). The required courses are:

- -EGS 4625 Fundamentals of Engineering Project Management 3 credit hours and letter graded; and
- -EIN 4354 Engineering Economy or EIN 3354 Engineering Economy 3 credit hours and letter graded; and

One optional course from the following list:

- CGN 4160 Civil Engineering Practice 3 credit hours and letter graded
- CGN 4600 Public Works Engineering and Management Practices 3 credit hours and letter graded
- EEL 3923C Electrical Engineering Design 1 3 credit hours and letter graded
- EIN 4210 Occupational Safety Engineering 3 credit hours and letter graded
- EML 4601 Heating and Air Conditioning System Design 3 credit hours and letter graded
- ENU 4192 Nuclear and Radiological Engineering Design 3 credit hours and letter graded

#### Rationale and Place in Curriculum

Describe the rationale for offering this new certificate and having it on the transcript, its place in the curriculum, how it will enhance the quality of the existing program or department. Also describe its overlap with any existing certificates and programs, and a justification for any such overlap. Note that documentation of consultation will be expected for any certificate with overlapping content.

#### Response:

The certificate will assist in providing many types of organizations with undergraduates having competencies to function effectively in a common and frequently encountered role. The certificate is expected to be in high demand. Having the certificate available will accomplish another strategic objective of the Engineering Leadership Institute and help support the Herbert Wertheim College of Engineering strategic initiative to "power the new engineer and transform the future". The certificate requirements were established in consultation with the various Departments in the College. There is no overlap between this certificate and other existing certificates or programs.

The request reflects recent or pending changes in a course number (currently EIN 4354 to EIN 3354) and credit hours (CGN 4160 from 4 credit hours to 3 credit hours)

### **Student Learning Outcomes**

List each student learning outcome with its associated courses, assessment type (e.g. course-related exam/assignment/grade, final paper/project/presentation, standardized exam, capstone) and method (e.g. rubric, faculty committee, single faculty member).

### Response:

Students completing the certificate will be able to:

- Apply processes and tools to develop, organize, manage, monitor and control delivery of engineering tasks, products, facilities, technologies or services in an optimized and efficient manner
- Apply manual and computerized methods to evaluate current and future costs and returns for options, and to plan, budget, manage and deliver selected engineering tasks, products, facilities, technologies or services.

Assessment will be through course related quizzes and exams, in-class applications, and/or out-of-class assignments (that may include presentations).

### Certificate

### **Engineering Project Management**

The engineering project management certificate reflects a comprehensive set of competencies that are aligned with a common career path through wide sectors in the practice of engineering. This certificate is open to undergraduate students in any engineering discipline.

**College:** Herbert Wertheim College of Engineering

**Credits:** 9, completed with minimum grades of B

The certificate's core studies include fundamentals of engineering project management, engineering economy, and one of several optional courses (identified below) offered through the various departments in the college.

### **Prerequisites:**

Undergraduate engineering student, junior or senior status. The only required course prerequisite is calculus 2, which is already taken by all engineering students.

Required Courses	Credits
EGS 4625 Fundamentals of Engineering Project Management	3
EIN 3354 or 4354 Engineering Economy	3
and one of the following courses:	
CGN 4160 Civil Engineering Practice	3
CGN 4600 Public Works Engineering and Management Practices	3
EEL 3923C Electrical Engineering Design 1	3
EIN 4210 Occupational Safety Engineering	3
EML 4601 Heating and Air Conditioning System Design	3
ENU 4912 Nuclear and Radiological Engineering Design	3
Total Credits	9

### Mcelroy, William J

**From:** Erenguc, S. Selcuk

Sent: Tuesday, August 28, 2018 3:21 PM

To:Toshikazu NishidaCc:Mcelroy,William J

Subject: RE: HWCOE Engineering Project Management Certificate

#### Dear Toshi,

Warrington College of Business has no objections to offering the following courses/certificate in the Herbert Wertheim College of Engineering:

Engineering Leadership courses, EGS4038 and EGS6039 Advanced Engineering Leadership courses, EIN4905 and ESI6900 EGN4641 and EGN6640 EGN4643 and EGN6642

Engineering Project Management course(s) and certificate in Engineering Project Management

Toshi, I hope this is what you were asking. —

# S. Selcuk Erenguc

Senior Associate Dean Warrington College of Business

Director

Hough Graduate School of Business

WARRINGTON COLLEGE OF BUSINESS UNIVERSITY OF FLORIDA

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From: Toshikazu Nishida

Sent: Tuesday, August 28, 2018 1:39 PM

To: Erenguc, S. Selcuk < selcuk.erenguc@warrington.ufl.edu>

Cc: Mcelroy, William J < mcelrowj@eng.ufl.edu>

Subject: HWCOE Engineering Project Management Certificate

Dear Selcuk,

My colleague, Bill McElroy, Assistant Director of the Engineering Leadership Institute asked me to reach out to the Warrington College of Business regarding a new graduate certificate in Engineering Project Management. I understand that in early 2016, our Engineering Leadership and Innovation Institutes obtained concurrence from Warrington College of Business (WCB) representatives (Robert Thomas, Jamie Kraft, and Haldun Aytug) with the Herbert Wertheim College of Engineering's offerings of course work in engineering leadership, advanced engineering leadership development, engineering project management, engineering entrepreneurship, and engineering innovation.

The concurrence received from WCB is attached and was in the form of the old UCC forms (undated). We recently initiated the electronic approval process for a new graduate certificate in Engineering Project Management. While we did not think this would be problematic with WCB, we wanted to request WCB concurrence with this new certificate offering to hopefully avoid delays should this come up during the approval process. The new process apparently no longer requires a UCC form submittal. However, we'd appreciate receiving WCB concurrence by return email as documentation of the coordination between our colleges in offering the new graduate Engineering Project Management certificate.

Please let me know if you need more details about the new certificate or course requirements. They were coordinated closely within our College. We would appreciate your assistance with an email concurrence with the new graduate certificate in Engineering Project Management which is based on the previously concurred courses.

Thanks, Toshi

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T. Nishida, Ph.D.

Associate Dean for Academic Affairs, Herbert Wertheim College of Engineering Professor, Department of Electrical and Computer Engineering Director, NSF Multi-functional Integrated System Technology (MIST) Center Member, Interdisciplinary Microsystems Group University of Florida Gainesville, FL 32611

nishida@ufl.edu

http://www.img.ufl.edu and http://mist-center.org