

# Cover Sheet: Request 13173

## Packaging Engineering Certificate

### Info

Process	Certificate New Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	James Leary drleary@ufl.edu
Created	10/12/2018 2:07:57 PM
Updated	9/24/2019 10:03:09 AM
Description of request	The Agricultural & Biological Engineering Department proposes a new Packaging Engineering Certificate. Packaging Engineering is inherently multi-disciplinary. Virtually every company that produces physical products employs "Packaging Engineers." In industry, a packaging engineer refers to a graduate of an engineering discipline who works to solve problems related to packaging. The majority of packaging engineers in industry are biological, chemical, mechanical, materials and industrial engineers. The proposed Packaging Engineering certificate will be exclusive to students enrolled in the Herbert Wertheim College of Engineering.

### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	ENG - Agricultural and Biological Engineering 514907000	Kati Migliaccio		10/13/2018
No document changes					
College	Conditionally Approved	ENG - College of Engineering	Heidi Dublin	Conditionally Approved by the HWCOE Curriculum Committee. Update verbiage to read "15 credits required from the list below..." as discussed in meeting. Please note in comments when this item is sent back up that this has been addressed.	10/30/2018
No document changes					
Department	Approved	ENG - Agricultural and Biological Engineering 514907000	Kati Migliaccio		10/30/2018
No document changes					

Step	Status	Group	User	Comment	Updated
College	Conditionally Approved	ENG - College of Engineering	Heidi Dublin	Approved by the Curriculum Committee and conditionally approved by the HWCOE Faculty Council pending one adjustment--"Define the person or persons in the department who will decide the substitution related to the sentence in the course syllabus, "Engineering students may substitute ... a packaging-related internship or coop for a required packaging engineering course." Please note in the comments that this has been addressed when you return the item to the college level.	12/5/2018
No document changes					
Department	Approved	ENG - Agricultural and Biological Engineering 514907000	Kati Migliaccio	Approvers of course substitutions have been identified.	12/11/2018
Packaging Engineering Certificate r3.docx					12/11/2018
College	Approved	ENG - College of Engineering	Heidi Dublin	Approved by HWCOE and Faculty Council	1/4/2019
No document changes					
Office of Institutional Planning and Research	Approved	PV - Office of Institutional Planning and Research	Cathy Lebo		5/6/2019
No document changes					
Associate Provost for Undergraduate Affairs	Approved	PV - Associate Provost for Undergraduate Affairs	Casey Griffith		9/24/2019
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			9/24/2019
No document changes					
Office of the Registrar					
No document changes					
OIPR Notified					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
Academic Assessment Committee Notified					
No document changes					

Step	Status	Group	User	Comment	Updated
College Notified					
No document changes					

# Certificate|New for request 13173

## Info

**Request:** Packaging Engineering Certificate

**Description of request:** The Agricultural & Biological Engineering Department proposes a new Packaging Engineering Certificate. Packaging Engineering is inherently multi-disciplinary. Virtually every company that produces physical products employs "Packaging Engineers." In industry, a packaging engineer refers to a graduate of an engineering discipline who works to solve problems related to packaging. The majority of packaging engineers in industry are biological, chemical, mechanical, materials and industrial engineers. The proposed Packaging Engineering certificate will be exclusive to students enrolled in the Herbert Wertheim College of Engineering.

**Submitter:** James Leary drleary@ufl.edu

**Created:** 12/11/2018 11:26:09 AM

**Form version:** 10

## Responses

**Certificate Name** Packaging Engineering

**Transcript Title** Packaging Engineering Certificate

**Credits** 15

**Level** Baccalaureate

**CIP Code** 14.4501

**Degree Program** Biological Engineering

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Certificate Description** The packaging engineering certificate emphasizes engineering solutions to problems associated with packaging systems that are often related to design and functionality of packaging, and product distribution.

**Requirements for Admission** This certificate is limited to undergraduate engineering students in the Herbert Wertheim College of Engineering.

**Requirements for Completion** Students will be required to successfully complete 15 credit hours of the packaging engineering courses listed below to earn the Packaging Engineering Certificate.

Engineering students may substitute one advisor-approved engineering elective, or a packaging-related internship or coop for a required packaging engineering course, where the student's engineering academic advisor for her/his major, or Dr. Bruce Welt in the ABE Department, can approve the substitution as described.

The minimum grade of a C is required in all classes used for this certificate or an S (satisfactory) if substituting internship or coop credit for a course.

Packaging Engineering courses offered:

PKG3001 Principles of Packaging (Credits 3)

PKG3103 Food Packaging (Credits 3)

PKG4008 Distribution and Transport Packaging (Credits 3)

PKG4011 Packaging Production and Processing (Credits 3)

PKG4101C Computer Tools for Packaging (Credits 3)

**Rationale and Place in Curriculum** The packaging and related industries seek engineers from many disciplines to improve all systems related to those industries. The Packaging Engineering Certificate will offer all engineering students in the Herbert Wertheim College of Engineering an opportunity to enhance their opportunities for employment within the packaging related industries, by taking packaging or related courses.

**Student Learning Outcomes** Content – PKG4008 Distribution & Transport Packaging

Apply knowledge of mathematics, science and engineering to packaging engineering problems.

Students will be able to design and conduct packaging engineering experiments and then analyze, interpret and use experimental data to optimize packaging designs and systems. The individual faculty course instructor shall assess learning outcomes in the form of laboratory reports and/or standard examinations.

Critical Thinking – PKG3103 Food Packaging

Design packaging and packaging systems to meet performance specifications within realistic economic, environmental, social, ethical, health and safety, manufacturing and sustainability

constraints. The individual course instructor shall assess learning outcomes in the form of homework and standard examinations.

Communication – PKG4101C Computer Tools for Packaging

Communicate packaging designs and technical data effectively to related packaging stakeholders.

Individual course instructor shall assess learning outcomes in the form of project reports and final oral poster presentation.

**Packaging Engineering Program**  
Ph.D.  
Agricultural & Biological Engineering Department  
PO Box 110570  
Gainesville, FL 32611-0570  
352-392-1864 x 229  
352-392-4092 Fax

Bruce A. Welt,

Professor

December 11, 2018

**Subject: Proposal to Packaging Engineering Certificate**

Dear HWCOE Curriculum Committee:

The Agricultural & Biological Engineering Department proposes a new Packaging Engineering Certificate. Packaging Engineering is inherently multi-disciplinary. Virtually every company that produces physical products employs “Packaging Engineers.” In industry, a packaging engineer refers to a graduate of an engineering discipline who works to solve problems related to packaging. The majority of packaging engineers in industry are biological, chemical, mechanical, materials and industrial engineers. The proposed Packaging Engineering certificate will be exclusive to students enrolled in the Herbert Wertheim College of Engineering.

Requirements: Students will be required to successfully complete 15 credit hours of the packaging engineering courses listed below to earn the Packaging Engineering Certificate. Engineering students may substitute one advisor-approved engineering elective, or a packaging-related internship or coop for a required packaging engineering course, where the student’s engineering academic advisor for her/his major, or Dr. Bruce Welt in the ABE Department, can approve the substitution as described.

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PKG4101C Computer Tools for Packaging (Credits 3)

Please feel free to contact me with any questions or comments.

Sincerely,

Bruce A. Welt, Ph.D.  
Professor, Coordinator – Packaging Engineering Program