

#### **MEMORANDUM**

TO:

Dorene Branson, Principal Assistant

**Faculty Senate** 

FROM:

Graduate Studies Committee

DATE:

April 3<sup>rd</sup>, 2013

SUBJECT:

Engineering and Technology Management Graduate Certificate

On Tuesday, April 3rd, the Graduate Studies Committee approved changes to the graduate Certificate in Supply Chain Management. These changes include changing the certificate name to Graduate Certificate in Logistics and Supply Chain Management. Additionally, the course E M 555 is now an elective and E M 567, a new course, is now required. Please forward this to the Faculty Senate for appropriate approvals.

# Washington State University MAJOR CHANGE FORM - - REQUIREMENTS

RECEIVED

(Submit original signed form and <u>TEN</u> copies to the Registrar's Office, zip 1035.5EB 2 6 2013

See https://www.ronet.wsu.edu/ROPubs/Apps/HomePage.ASP for this form.

WSU REGISTRAR

\*Submit an additional copy to the Faculty Senate Office, French Administration 338, zip 1038.

Department Name Engineering and Technology Management

1. CHECK PROPOSE				
* Change department/program name from			to	
*□ New degree or pro	ogram in			
* New degree or program in  * Change name of degree from Graduate Certificate in Supply Chain Management  * Drop degree or program in				
in prop degree or pr	ogram <i>m</i>			
*□ Extend existing d	egree or progra	m to	campus	
☐ New Major in				
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☑ Revise Majer requ	irements in Gra	aduate Certificate in Logistics and S	Supply Chain Management	
Drop Major in	•		2	
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in Drop Undergradua	ate Certificate i	n		
Other	•			
Effective term/year Fall 2	2013			
Patti Elshafei		(509) 335-0125	pelshafei@wsu.edu	
Contact Perso	n	Contact Phone No.	Contact email	
96				
2. GIVE REASONS FO	OR EACH REG	QUEST MARKED AB	<b>OVE.</b> (Attach additional paper if necessary; so	
reverse side.) See attached. C	Old requirements: E N	1.530 F.M.555 F.M.560 and ei	ther E M 570 or E M 590. New requirements: E M 560, E M	
.567, E M 540 an	d either E M 555 or I	E M 590.	ther E M 370 or E M 590. New requirements: E M 560, E M	
4. SIGN AND DATE A	PPROVALS,			
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# Graduate Certificate in Logistics and Supply Chain Management

Every organization has internal supply chains, and links to external suppliers and customers. Interlinking organizations span the spectrum from raw materials to finished products and services in the hands of the consumer. The supply chain extends even to final disposition of the commodities consumed from concept to grave. The structured dependency of such chains, the uncertainty of forecasts and systemic delays are amplified as individual links in the supply chain try to optimize their performance. Even minor changes in the market can cause wild swings in economic performance. The solution must be based upon cooperative, systemic measurements; correct communications between elements; rapid responses to actual demand; and careful selection of inventory buffers and locations. The contributions of design for manufacturability, six sigma quality improvement, operation theories, information systems, enterprise planning and theory of constraints replenishment all contribute to understanding the solution. It is possible for supply chains of independent business units to reduce their inventory investment, shorten response time, minimize stock—outs and increase variety and cut operations costs all at the same time. A well functioning supply chain can dramatically reduce waste and increase productivity and profits for all members.

#### Graduates will be able to:

- Understand strategy and tactics of supply chain management
- Explain the causes of dysfunctional actions
- Know the right measurements to use inside and between supply chain linkages
- Establish the correct communication signals to improve response time with less inventory
- Correctly position protective inventory and know how to adjust the level as demand and variability require
- Contribute to stabilize individual and linkages in the Supply Chain
- Describe ways to reduce chaotic variability and control the entire supply chain from start to finish.

## Requirements

E M 530

E M 560

E M 567

E M 555or E M 590

### ETM Justification for certificate name change and for change of requirements

Certificate Name Change: Supply Chain Management to Logistics and Supply Chain Management

The current certificate focuses on the practice of designing and analyzing supply chains. Within the past few years, supply chain activities have evolved to include a broad perspective of the support of systems in the engineering management setting.

With the substitution of a new course and certificate name change this certificate will address the logistics and supportability activities important to students planning to work or are working in the field of logistics and supportability.

The certificate name change will accurately describe the updated content in the coursework required for completion of this certificate.

The new course E M 567 System Supportability and Logistics Management will become a required course to earn the certificate. E M 555 will replace E M 570 as being one of the electives. This strengthens the certificate and will allow graduates to be better prepared with the best practices in system supportability and sustainability.

# Logistics and Supply Chain Management Certificate

#### **New Requirements:**

E M 560 Integrated Supply Chain Management

E M 567 System Supportability and Logistics Management

E M 530 Applications of Constraints Management

Choose one of the following:

EM 555 Enterprise Resource Planning

OR

EM 590 Design for Product and Service Realization

#### Former Requirements:

E M 560 Integrated Supply Chain Management

E M 530 Applications of Constraints Management

E M 555 Enterprise Resource Planning

Choose one of the following:

E M 570 Six Sigma Quality Management

OR

E M 590 Design for Product and Service Realization