Washington State University
MAJOR CHANGE FORM - REQUIREMENTS
(Submit original signed form and TEN copies to the Registrar's Office, zip 1035.)
See https://www.ronet.wsu.edu/ROPubs/Apps/HomePage.ASP for this form.
*Submit an additional copy to the Faculty Senate Office, French Administration 338, zip 1038.

Department Name Engineering and Technology Management

1. CHECK PROPOSED CHANGES.
   □ Change department/program name from ____________________________ to ____________________________
   □ New degree or program in ____________________________
   □ Change name of degree from ____________________________ to ____________________________
   □ Drop degree or program in ____________________________
   □ Extend existing degree or program to ____________________________ campus
   □ New Major in ____________________________
   □ Change name of Major from ____________________________ to ____________________________
   □ Revise Major requirements in ____________________________
   □ Drop Major in ____________________________
   □ Revise certification requirements for the Major in ____________________________
   □ New Option in ____________________________
   □ Revise requirements for the Option in ____________________________
   □ Drop Option in ____________________________
   □ New Minor in ____________________________
   □ Revise Minor requirements in ____________________________
   □ Drop Minor in ____________________________
   □ New Undergraduate Certificate in ____________________________
   □ Revise Undergraduate Certificate requirements in ____________________________
   □ Drop Undergraduate Certificate in ____________________________
   □ Other ____________________________

Effective term/year Fall 2013

<table>
<thead>
<tr>
<th>Contact Person</th>
<th>Contact Phone No.</th>
<th>Contact email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patti Elshafei</td>
<td>(509) 335-0125</td>
<td><a href="mailto:pelshafei@wsu.edu">pelshafei@wsu.edu</a></td>
</tr>
</tbody>
</table>

2. GIVE REASONS FOR EACH REQUEST MARKED ABOVE. (Attach additional paper if necessary; see reverse side.) See attached. Old requirements: E M 530, E M 555, E M 560, and either E M 570 or E M 590. New requirements: E M 560, E M 567, E M 540 and either E M 555 or E M 590.

4. SIGN AND DATE APPROVALS.

chair signature/date 2/10/2013
Dean signature/date 2/10/2013
General Education Com/DATE

Catalog Subcom/date Academic Affairs Com/DATE Graduate Studies Com/DATE Senate/DATE
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 555 or 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:
EM 560 Integrated Supply Chain Management
EM 567 System Supportability and Logistics Management
EM 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:
EM 560 Integrated Supply Chain Management
EM 530 Applications of Constraints Management
EM 555 Enterprise Resource Planning
Choose one of the following:
    EM 570 Six Sigma Quality Management
        OR
    EM 590 Design for Product and Service Realization