Class Schedule - Fall 2018

Industrial Engineering

IE 598  **Special Topics**  credit: 0 TO 4 hours.

Subject offerings of new and developing areas of knowledge in industrial engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. Approved for letter and S/U grading. May be repeated in the same or separate terms if topics vary.

<table>
<thead>
<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>70577</td>
<td>Lecture</td>
<td>MLF</td>
<td>08:00 AM - 09:20 AM</td>
<td>TR</td>
<td>112 - Transportation Building</td>
<td>Lane, M</td>
</tr>
</tbody>
</table>

Credit Hours: 2 hours

Machine Learning in Fin Lab

Restricted to MS: Financial Engineering.


Machine learning is an increasingly important tool in every financial enginee’s toolbox. Machine Learning includes the design and the study of algorithms that can learn from experience, improve their performance and make predictions. In this introductory course students will explore the main concepts behind several different machine learning algorithms and gain practical experience implementing them using Python and several of the most frequently used packages; pandas, NumPy, scikit-learn, etc.. Students will also learn how to construct and interpret their own machine learning models in Python.

70387 | Discussion/Recitation | PD | 10:00 AM - 10:50 AM | F | - | Noonan, J |

70387 | Discussion/Recitation | PD | 11:00 AM - 11:50 AM | F | - | Noonan, J |

70387 | Lecture | PD | 05:00 PM - 05:50 PM | W | - | Noonan, J |

Credit Hours: 2 hours

MSFE Professional Development

Restricted to MS: Financial Engineering.

This course will provide MSFE students with content, instruction, and experience that will increase their likelihood of success as (1) student (2) job seeker and applicant and (3) professional - particularly in the context of business.

70605 | Lecture | QS | 03:30 PM - 04:50 PM | TR | 260 - Mechanical Engineering Bldg | Stolyar, A |

Credit Hours: 4 hours

Queueing Systems

Restricted to Graduate - Urbana-Champaign.

Course Prerequisite: IE 410 or equivalent graduate stochastic processes course. Over the last 100 years queueing theory has become a powerful tool for analysis and design of a wide range of engineering systems. Modern applications include: telecommunication, information and computing systems; network clouds; inventory control; service systems; and others. This course is an introduction to queueing systems and their applications in engineering. Topics include both classical single-stage models and queueing networks. Students will learn how to apply key ideas and methods of queueing theory, such as: Markov processes, embedded Markov chains, PASTA property, reversibility, product-form stationary distributions, stochastic stability, asymptotic analysis.