March 13

**Data Analysis and Visualization in MATLAB**

Time: 10:00AM – Noon  
Location: North Campus, Pasteur Hall, Room 301  
Vendor: MathWorks  
Presenter: Adam Filion, Application Engineer, MathWorks  
Registration Page: [http://www.uml.edu/it/](http://www.uml.edu/it/) (Select the Workshop Registration Button)

*This session will introduce specific examples to demonstrate how to acquire, analyze and visualize data through mathematical, statistical and engineering functions that support common engineering operations.* This session is designed to provide an overview of the MATLAB technical computing environment, including desktop tools for editing and debugging code, publishing your work, programming and 3-D visualization, and creating graphical user interfaces (GUI). A number of new features from the latest version of MATLAB (2012b) will be integrated.

Highlights Include:
- Importing data into MATLAB
- Performing statistical analysis and curve fitting
- Automating analysis via automatic MATLAB code generation
- Building GUIs and generating reports

MATLAB licenses are provided at the department level.

March 13

**MATLAB: Teaching Physics – Incorporating Computational Techniques into Curricula**

Time: 1:30PM – 3:30PM  
Location: North Campus, Pasteur Hall, Room 301  
Vendor: MathWorks  
Presenter: Loren Shure, Ph.D., Principal MATLAB Developer  
Registration Page: [http://www.uml.edu/it/](http://www.uml.edu/it/) (Select the Workshop Registration Button)

*This session will present tools, techniques and examples for incorporating computational modeling and data analysis into the curriculum. Demo topics draw from optics, mechanics, electricity, and data analysis. Physics, Engineering, and other physical sciences departments have increasingly embraced computation as a tool to explore theory and analyze experimental data. As today’s students prepare to enter the workforce, they will increasingly be expected to have computational skills. You will be shown how to:*
- Create models derived from first principles symbolically
- Identify parameters that optimize system performance
- Work with various computational modeling paradigms
- Predict responses using regression trees
- Generate reports to document model derivation and simulation results
- Visualize models and data

MATLAB licenses are provided at the department level.
March 14

Qualtrics Informational Vendor Presentation

Time: 10:00AM – 11:00AM
Location: South Campus, O’Leary Library, Room 222
Vendor: Qualtrics
Presenter: Ryan Durrant, Academic Sales
Registration Page: http://www.uml.edu/it/ (Select the Workshop Registration Button)

*Qualtrics is an online survey tool that makes sophisticated research simple.* Qualtrics enables users to do any kind of online data collection and analysis, including market research, customer satisfaction, evaluations, and website feedback. Qualtrics provides a robust platform that allows researchers to create and manage surveys through an intuitive interface of over 100 question types and use a variety of distribution methods along with direct exports in SPSS and Excel. *Qualtrics licenses are purchased departmentally; university-wide licenses are not available at this time.*

March 14

Introduction to Lecture Capture – In the Classroom or Anywhere!

Time: 1:00PM – 2:30PM
Location: North Campus, Kitson Hall, Room 308
Leader: Randy Tyndall, UMass Lowell
Registration Page: http://www.uml.edu/it/ (Select the Workshop Registration Button)

*Lecture capturing is here to stay, so come learn more about this exciting technology.* Learn which lecture capture options address your needs, ranging from using it in a classroom to recording on a laptop anywhere at any time. This session will show you how easy it can be without having to change your teaching style. This workshop is relevant to faculty who are interested in using lecture capture and want to learn more! Echo360 is great for capturing a class, that special speaker or student presentation, all with you in control of the final recording. *(Beginner Level)*

March 15

Apple: iPad as a Tool to Engage, Assess & Motivate Your Students - Vendor Hosted

Time: 2:30PM – 4:00PM
Location: North Campus, Cumnock Hall, Trustees Room
Vendor: Apple
Presenter: Alison J. Terry, Ph.D.
Registration Page: http://www.uml.edu/it/ (Select the Workshop Registration Button)

*iPad inspires creativity and hands-on learning with features you won’t find in any other educational tool — on a device that students really want to use.* We are currently undergoing a fundamental shift in the education landscape. Students are now growing up in - and graduating into - a connected, information-rich world which presents both challenges and opportunities for educators. With the incredibly powerful and versatile mobile learning tools we now have available, faculty have the ability to truly personalize learning, engage and motivate students, and practice authentic assessment. At this session, we will be discussing innovative solutions for pedagogy, productivity, and research. *(Beginner Level – iPads are not required)*
### April 12

**Apple: Why the MAC and iPad Together? – Vendor Hosted**

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**Registration Page:** [http://www.uml.edu/it/](http://www.uml.edu/it/) (Select the Workshop Registration Button)

*Are your faculty and staff sometimes confused as to when, why and how to use the iPad vs. a Mac?* In this session we’ll explore the strengths of each tool and provide a blueprint for success. Together the iPad and Mac are powerful educational tools that enable the creation and delivery of educational content in ways many have never imagined. Come learn how to maximize the power of Apple technology at your institution. *(Beginner Level – iPads are not required)*

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### April 26

**Wolfram: Mathematica in Education and Research – Vendor Hosted**

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<td>Vendor</td>
<td>Wolfram</td>
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<tr>
<td>Presenter</td>
<td>Kelvin Mischo, Certified Mathematica Instructor</td>
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**Registration Page:** [http://www.uml.edu/it/](http://www.uml.edu/it/) (Select the Workshop Registration Button)

*This session will focus on data analysis, load-on-demand data sources, charting/graphics, and statistical functionality for business, humanities, social and physical science, mathematics and statistics.* Audience: Faculty new to Mathematica or faculty that want a tutorial on Mathematica 9 (released late 2012) and how that can improve class projects and research. Wolfram’s free CDF Player is also a topic of interest to faculty when considering how to share research projects or course materials with colleagues that may not have Mathematica 9.

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**Wolfram: Mathematica in Engineering Education – Vendor Hosted**

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**Registration Page:** [http://www.uml.edu/it/](http://www.uml.edu/it/) (Select the Workshop Registration Button)

*Faculty in Engineering will be interested in the symbolic-numeric hybrid structure of Mathematica, working with large data sets, image processing, solving a wide range of Mathematical problems, and control systems.* Audience: Faculty new to Mathematica or faculty that want a tutorial on Mathematica 9 (released late 2012) and how that can improve class projects and research. Wolfram’s free CDF Player is also a topic of interest to faculty when considering how to share research projects or course materials with colleagues that may not have Mathematica 9.
Presenter Biographies:

**Apple, Inc.:** Dr. Alison Terry is a Higher Education Development Executive with Apple Inc. Alison is a former Developmental Psychology professor whose diverse research interests included academic achievement, student motivations, and leadership. Alison holds a Ph.D. from U.C. Davis and a BA from Cornell University, and has received numerous commendations for her teaching, including a Faculty of the Year award at the University of Maine, Farmington. Alison speaks on the theory and practice of transforming education with mobile technology.

**The MathWorks, Inc.:**
Adam Filion holds a BS and MS in Aerospace Engineering from Virginia Tech. His research involved nonlinear controls of spacecraft and periodic orbits in the three-body problem. After graduating he joined the MathWorks Engineering Development Group in 2010 and moved to Applications Engineering in 2012.

Loren Shure is a Principal MATLAB Developer and has worked at MathWorks for over 25 years. She has co-authored several MathWorks products in addition to adding core functionality to MATLAB. Loren currently works on the design of the MATLAB language. She graduated from MIT with a B.S. in Physics, and from the University of California, San Diego, Scripps Institution of Oceanography with a Ph.D. in Marine Geophysics. Loren writes about MATLAB on her blog: [http://blogs.mathworks.com/loren](http://blogs.mathworks.com/loren).

**Wolfram Research:** Kelvin Mischo is Academic Sales Manager at Wolfram Research and has worked with educators to integrate *Mathematica* into courses and research since 1998. He has given over 150 technical seminars on *Mathematica* to high schools, two-year colleges, and universities.

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**Faculty workshops are co-sponsored by the Office of the Provost, Faculty Development Committee, and Information Technology.**