

## WORKSHOP EXPRESSION OF INTEREST

# MATLAB Based Teaching Resources for the modern classroom

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## WORKSHOP MODE

Face to Face AND virtual

### **OVERVIEW OF WORKSHOP**

In this workshop we'll be giving attendees "hands on" experience with a collection of the latest MATLAB services that support engineering education. In part 1 of this session, attendees will get to experience MATLAB Online – (MATLAB launched through a web browser) which combined with MATLAB Drive, allows tutorial content to be shared and run on ANY computer that has an internet connection. In part 2 of this session, attendees will practice creating an online course using MATLAB GRADER – the web based tool that automates the grading of MATLAB assignments. In the third and final part of this session, attendees will download and explore MathWorks developed courseware – free teaching content and Virtual laboratories ready to be used in tomorrow's class.

#### ACTIVITIES

Attendees of this workshop will get to experience AND practice using, MATLAB Online, MATLAB Drive and MATLAB GRADER. We'll look specifically at:

- How MATLAB Online and MATLAB Drive allows a professor to share tutorial content with a class.
- How MATLAB GRADER can be used to author/design assessments.
- How MATLAB GRADER can be used to automate the grading of assignments and pop quizzes.
- How MathWorks developed Courseware can be integrated into your existing curriculum.

#### TARGET AUDIENCE

Academics teaching undergraduate classes.

Attendees will need a MathWorks account(free) and a computer with internet access.

The Web browser requirements needed are summarized HERE

Although NOT mandatory, all attendees are encouraged to complete the 2 hour(free) <u>MATLAB Onramp</u> self-paced training course before attending this workshop.

#### OUTCOMES

MATLAB based Online resources (eg: MATLAB Online, Drive, GRADER) allow academics to quickly share, communicate and assess teaching content with little effort and NO fuss. It's time to embrace modern MATLAB. **REFERENCES (OPTIONAL)** 

#### N/A.

#### KEYWORDS

MATLAB Online, MATLAB Drive, MATLAB GRADER, MATLAB Courseware

#### PRESENTERS' BACKGROUNDS

Bradley Horton is a member of the Academic Customer Success team at MathWorks, helping faculty members better utilize MATLAB and Simulink for education and research. Bradley has supported and consulted for clients on projects in process control engineering, power systems simulation, military operations research, and earthquake impact modelling. Before joining MathWorks, Brad spent 5 years as a systems engineer with the Defence Science & Technology Organization (DSTO) working as an operations research analyst. Bradley holds a B.Eng. in Mechanical engineering and a B.Sc. in Applied mathematics.