



# MARUM / GLOMAR Basic Skills and Methods Course

# Introduction to MATLAB

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MARUM – Center for Marine Environmental Sciences

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## Objectives

MATLAB is a flexible and easy programming language, which is widely used to process numerical data. MATLAB is comparatively well documented and supported by a large group of users. MATLAB shares the syntax with some other languages, e.g., *Octave* and *Scilab*, which are both free to use.

The aim of this course is to provide basic knowledge of programming. Experience with other programming languages is not required. With some effort you will be able to import and process data, and to produce individual plots from your results.

### Topics

<u>Programming</u>: syntax, variables, data types, scripts, functions <u>Data</u>: import, storage, export <u>Plotting</u>: object hierarchy, handles, 3D <u>Help</u>: help pages, FEX, books

<u>Application</u>: it has been good practice to choose programming examples according to the actual work of participants at some stage during the course. Topics were statistics, interpolation, time series analysis, etc. However, in this course the focus is on the technical steps around the mathematical problems.

#### Please note:

Participants who would like to **bring their own laptops** may do so but are responsible to make sure that the software is running properly by the beginning if the course. During the course, support can only be given for laptops provided by GLOMAR. The main operating system during the course will be Windows.

## Target group

Beginners

### Location and time

MARUM, University of Bremen, Leobener Str., 28359 Bremen, Germany, Room 2070

09.00 – 17.00 hrs.





COURSE PROGRAMME

## Registration

To register for this course, please fill in the registration form.

Please note that you registration will be binding.

The registration deadline for this course is **7 July 2016**.

Any enquiries regarding the course should be addressed to glomar-courses@marum.de.