

Short Courses in Geomatics at the University of Glasgow

These courses are part of professionally accredited Geomatics programmes offered by The University of Glasgow, leading to a PGCert (60 credits), PGDip (120 credits) or MSc (180 credits);

see:

<http://www.gla.ac.uk/postgraduate/taught/geospatialandmappingsciences/> and <http://www.ges.gla.ac.uk:443/degrees/postgraduate/courses/geomatics>

for further details of these programmes.

Although our Geomatics programmes have been designed, with input from the Scottish Geomatics sector, as a starting point for young graduates interested in a Geomatics career, these *short courses* are offered particularly for those with several years of surveying and mapping experience needing to reinforce fundamentals or gain relevant qualifications which support professional membership applications.

Fundamentals of Geomatics 1 – 10 credits (Aug 2-6, 2011; Jan 4-8, 2012)

Fundamentals of Geomatics 2 - 10 credits (Sept 5-9, 2011; Jan 10-14, 2012)

GIS Principles – 10 credits (Aug 30 – Sept 2, 2011; Dec 13-16, 2011)

These are modules within our RICS and Chartered ICES accredited postgraduate programmes, which may be taken in an intensive mode, either leading to a university qualification, or stand-alone. At the moment we offer a total of 30 credits in intensive mode, but hope to offer further in due course – although NOT land survey, itself, because of field work constraints.

Fundamentals of Geomatics 1 (Tuition fees - including text-books: £375 for EU residents; £1188 for non-EU residents)

This is the first half of a 20 credit module in our postgraduate programme, with no prerequisite.

Topics covered include: basic principles of geodesy; size and shape of the Earth; datums; Earth based coordinate systems; coordinate transformations; map projections; selection of map projections.

Assessments (completion is required to obtain credit; some submission dates are after the end of the taught component; there are also un-assessed submissions required)

- Applications of Plane Trigonometry (20%)
- Applications of Spherical Trigonometry (20%)
- Using Projection Change software (20%)
- Test (10%)
- Exam – to be taken after the Fundamentals 2 module (30%).

Fundamentals of Geomatics 2 (Tuition fees - including text-books: £375 for EU residents; £1188 for non-EU residents)

This is the second half of a 20 credit module in our postgraduate programme, with Fundamentals of Geomatics 1 (or equivalent) as a prerequisite.

Topics covered include: precision and accuracy of geospatial measurements; correlation; least squares adjustment applied to surveying and mapping; introduction to programming for mapping applications.

Assessments (completion is required to obtain credit; some submission dates are after the end of the taught component; there are also un-assessed submissions required)

- Application of Matrix Algebra in Least Squares Adjustment (35%)
- Writing Projection Change software (35%)
- Exam (30%).

Note: The exam for Fundamentals of Geomatics 1 and 2 is at one sitting.

GIS Principles (Tuition fees - including text-books: £375 for EU residents; £1188 for non-EU residents)

This is a 10 credit module in our postgraduate programme, with no prerequisite. Topics covered include: understanding the aims of GIS; 2&3D vector structures; 2&3D raster structures; analytical tools; applications; Geospatial database design; data sources; research directions.

Assessments (completion is required to obtain credit; some submission dates are after the end of the taught component; there are also un-assessed submissions required)

- Forest Suitability map (10%)
- 3D Visualisation (15%)
- Essay (30%)
- Report on a recreation and GIS project (40%)
- Geospatial database design (5%)

PLEASE CONTACT THE COORDINATOR, TO RECEIVE CONFIRMATION OF ACCEPTANCE AND ATTENDANCE ON ANY COURSE, AT LEAST FIVE WORKING DAYS BEFORE THE COURSE COMMENCES

For further details contact the Coordinator: Dr Jane Drummond, MRICS MCInstCES

Email: jane.drummond@glasgow.ac.uk
 Telephone: 44 (0)141 330 4208

