

a. Advanced core bioscience skills

These courses build on the skills developed in Year 1 through the foundation masterclasses and are open to all second and third-year EASTBIO students. Courses include:

I – Mathematics and data analysis

- Advanced statistics and error analysis
- Programming in Python
- R/Bioconductor and Unix
- Next-Generation sequencing data analyses and mining
- *NVivo* qualitative data analysis

II – Multidisciplinary approaches to understanding biological systems

The EASTBIO partners offer a large number of postgraduate taught MSc courses open to all EASTBIO students, addressing directly the development of multidisciplinary areas of research. These include MSc course modules in:

- Synthetic Biology
- Medicinal Chemistry
- Drug Discovery
- Chemical Biology
- Physical Techniques in Chemistry

Further information and relevant links for each course can be found at www.eastscotbiotdp.ac.uk/year-2-advanced-training#advancedbioscience.

b. Advanced technology training

Most courses offered by the partner universities are available to EASTBIO students across the partnership. These include but are not limited to:

- **Microscopy:** UoE, UoD and UoA
- **Genetic Engineering and Genome analysis:** UoE
- **Proteomics and protein purification:** UoE /SULSA
- **Protein crystallography:** UoStA
- **Flow cytometry:** UoA, UoD, UoE

The research training provided by EASTBIO will supplement the training that you will receive in your research group and host department. Do take advantage of any training opportunity available to you, including optional undergraduate and MSc modules, journal clubs, seminars and conferences in your field, as well as training opportunities offered to BBSRC-funded students that you will be notified about by EASTBIO during the course of your studies. We expect all EASTBIO students to be actively involved in the research culture of their host institution and to act as EASTBIO ambassadors by widening the PhD student network across Scotland.