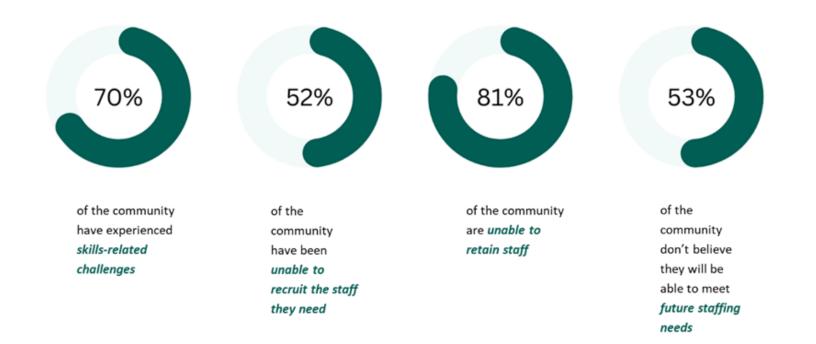
# Shape the Future of Geospatial Talent

Host a placement through Scotland's first Geospatial Foundation Programme



## Geospatial Skills are critical – and in short supply

- The geospatial sector is booming. The <u>geospatial market</u> was valued at over £6bn in 2024.
- But there's a pipeline problem.
- The Geospatial Foundation Programme, delivered by Fife College, is a first of its kind and your opportunity to make a difference.



# A Launchpad for Future Geospatial

- The Geospatial Foundation Skills Programme is a pilot course that aims to unlock a future in the geospatial industry for early-stage careers.
- It provides an opportunity for students to learn to create maps, analyse spatial data, and use GIS software. It's a hands-on course opens pathways to exciting careers in urban planning, environmental management, and more.
- The course was a 'Short Full time Course' lasting 18 weeks 360 hours learning 3 days a week. This allowed many to keep a full-time job whilst studying.
- This was the first time that this course was delivered. Its curriculum was industry-led and the course started 3rd Feb.
- Throughout the modules there were practicals, assessments, tasks and exams.



### **Course Content Overview**

- **1. Geospatial Data Concepts and Principles:** From paper maps to GIS, exploring fundamental data types, coordinate systems, GPS, georeferencing, key terminology and organisations.
- 2. Geospatial Software and Analysis Tools: Using tools like ArcGIS and Google Maps. Preparing, cleaning, editing, and analysing data; concepts of data management; applying basic statistics; data quality and standards.
- **3.** Fundamentals of Earth Observation and Satellite Technology: Learning about satellites, orbits, sensors, and real-world applications—from weather to land use. Introduction to image interpretation and processing satellite imagery. Artificial intelligence and machine learning are introduced.
- 4. Cartography: Principles of design and visual communication to produce clear, informative and relevant maps for diverse audiences. Basic cartographic skills; map types, scale and ethical issues.
- 5. Introductory Project Management: Planning geospatial projects, managing timelines, and addressing common risks.
- 6. Geospatial Applications: Discovering how GIS is used across sectors: e.g. planning, agriculture, disaster response, transportation, environmental monitoring, and national security.
- 7. Geospatial Data in Society and Policy Formation: Understanding its role in climate action, sustainable development, and the UN's SDGs.



### **Additional Content**

### **Data Science**

- Working with data sets
- Cleaning and analysing data
- Descriptive and inferential statistics
- Sampling types
- Data Ethics

### ITAS

- Working with data
- Presenting outcomes
- Proficient in Microsoft Suite (PowerPoint, Word, Excel, Access)

### **Environmental Science**

- Importance of Sustainability
- SDGs in Geo
- Working in laboratory settings
- Writing scientific laboratory reports

• There was also a Carbon Literacy Course and Certification included in the curriculum

## Real Benefits for your Organisation

#### Access ready-to-go talent

Participants are equipped with a basic understanding of GIS and remote sensing, including data collection, ArcGIS skills and the ability to create a map and perform basic data preparation and manipulation. This is local talent, already familiar with Scottish culture and not dependent on work permits — ready to make an immediate contribution.

#### Bring fresh ideas and motivation

They're eager, curious, and keen to prove themselves in real-world work.

#### Lower cost, higher commitment

Expected salary levels are lower than Master's grads — and they're more likely to stay, with strong ties to the local area. This is especially valuable at a time when it's becoming more difficult to recruit staff through traditional graduate routes, with fewer young people entering the field.

#### Support essential GIS tasks with minimal overhead

Ideal for helping with routine but time-consuming jobs like digitising, map updates, data entry, data cleaning or basic spatial analysis — freeing up your team to focus on higher-level priorities.

#### Shape the future workforce

Help influence a new pipeline of skilled, diverse geospatial professionals.

#### **Raise your profile**

Show leadership in supporting a national initiative developing inclusive, forward-looking talent.

### How it Works

- 1. You provide a job description / overview of the work / project the student will be involved in.
- 2. Opportunity summaries will be collated and shared with students.
- 3. Interested candidates will be introduced to prospective employers and a decision can then be made to proceed to interview.
- 4. You give feedback with the option to recruit e.g. 8-12 week placement / temporary contract / longer-term or permanent role.
- 5. You determine the most suitable format ideally, office-based or hybrid format to enable inperson support.
- 6. Agree remuneration with the candidate salary (preferred) or financial support for e.g. travel expenses.
- 7. Fife College will continue to support students after course completion through its Employability Service.

### Meet the Talent – A new College educated Geospatial Cohort

- This is a level 6 SCQF Qualification equivalent to a Scottish Higher.
- College learning is not the same as a Degree or an MSc, it is more practically focused.
- 15 students are taking part in the course from a diverse range of backgrounds, whilst some are school leavers others have experience in areas such as public transport, sales and education.

## The Cohort's Project Overview (40 hours)

### **Application of theoretical skills to industry-challenges**

Each student spent 40 Hours dedicated to working on a Project as specified by an industry partner.

Partners provided data and defined a Task.

Most Projects were 'real world' with the output adding to the organisation's data knowledge.

Partners included Network Rail, Scottish Forestry, Harper Collins Publishing, Forth Rivers Trust, WSP Engineering and IDOX.

Within the project each student met the client, prepared a "statement of work" which outlined the process for coordinating, managing, monitoring, and then concluding and disseminating any spatial and non-spatial research.

The final output was the agreed deliverable (for example, a map, data, report, dashboard) as well as a "project closing report".

### Interested in Getting Involved?

- We'd be happy to arrange a 1:1 or welcome you for a visit to the college.
- Get in touch to explore how one of our students could work for your organisation.
- Contact Fife College for more information:

Lauren Miller, Lecturer - <u>laurenmiller@fife.ac.uk</u>

Be the reason someone discovers their future in geospatial.