



University College Dublin
Ireland's Global University

| Project Details: | |
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| Host Institution: | University College Dublin (UCD) |
| Location: | Belfield, Dublin 4, Ireland |
| College/Company: | College of Engineering & Architecture |
| School/Unit: | School of Civil Engineering |
| Website: | http://www.ucd.ie/civileng/ |

| Project Lead: | |
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Project Title:
Environmental Engineering, sediment issues, forest hydrology.

Brief Project Description:

The opportunity would involve the placement student joining the DAFM funded HydroSED project that is ongoing in the UCD Schools of Civil Engineering, Biology and Environmental Science, Agriculture and Food Science and Geography. Forestry presents pressures to the ecological status of watercourses, with sediment release being a recognised stressor in this regard. This field-based project is measuring flow change and sediment release at seven forestry sites with adjacent or nearby lotic waterbodies. Study sites reflect a range of soils, topographical and hydrological settings relevant to Irish forestry and the monitoring strategy targets different forestry operations (afforestation, harvesting, windrowing and reforestation). Data is related to levels of deposited sediment in riverbeds and ultimately to changes in hydro morphology and aquatic community health, with sediment fingerprinting being used to disentangle forestry operation impacts on suspended and deposited fine sediments from other catchment pressures. The efficacy and performance of commonly adopted sediment control measures in forests is also assessed.

Project Dates:

From the end of May to August (specific dates and weekly hours can be agreed between the PI and the student directly over a 10-week period).

Candidate Requirements:

An interest in the issues being explored by the project and the ability and willingness to join a larger research team and engage in fieldwork in rivers and forestry settings. Note, that fieldwork can involve long days working in remote field settings and can on occasion, require that researchers have overnight stays in accommodations close to study sites