

Programme Overview	
<b>Programme Title:</b> Engineering Summer School: Bridges to Tomorrow	
<b>Credit Value:</b> 10 UCU (2 weeks)	<b>Programme Level:</b> 5 (UG Year 2)
<b>Period:</b> Summer (2 weeks)	<b>Programme Dates:</b> Block B: 12 July – 26 July 2025

Programme Description and Learning Outcomes	
<b>Programme Description</b>	<p>The aim of this programme is to give students an engaging experience of UK academia, industries and culture, while partaking in team engineering design projects. Students will learn engineering skills from UEA academics and be mentored in their innovation projects. During the programme, they will also take a number of cultural visits and a visit to a regional industry. The summer school will culminate in team presentations, with an associated award ceremony.</p> <p>The programme combines lectures by academics within different engineering fields, training on CAD and/or simulation software packages, research skills and soft skills sessions, individual research time, hands-on lab experiences, seminars, and career development advice. Participants will learn about best practice in engineering problem solving, teamwork, and managing projects. The aim is to allow participants to learn this best practice and apply it within a team-based project based on a real-life industry challenge.</p> <p>Specifically, the 2-week engineering team project will include designing, simulating and/or manufacturing and testing a mechanical device or component to address a specific energy and/or sustainability challenge.</p>
<b>Learning Objectives</b>	<p>The learning objectives of this programme are to:</p> <ul style="list-style-type: none"> <li>• Familiarise students with best practice of engineering team-based problem solving.</li> <li>• Engage the students to consider the holistic multidisciplinary factors affecting real-life challenges and incorporate these into their solutions.</li> </ul>

	<ul style="list-style-type: none"> <li>• Expose students to a combination of engineering tools including software packages (e.g. CAD, CFD), experimentation and data analysis.</li> <li>• Train students on effective means of graphical and oral presentation</li> </ul>
<b>Learning Outcomes</b>	<p>By the end of this programme, students will be able to</p> <ul style="list-style-type: none"> <li>• Apply an effective approach to engineering problem solving to deliver solutions to real-life challenges.</li> <li>• Use software and/or experimental approach to design and analyse solutions to engineering problems.</li> <li>• Communicate project work, graphically and orally to justify solutions through the appraisal of technical literature.</li> <li>• Work as a member of an engineering team, promoting equality of opportunity to learn and succeed.</li> </ul>
<b>Programme Assessment</b>	<p>The programme is assessed using a combination of team poster presentation and individual contribution reflection.</p> <p><b>Team Poster Presentations:</b> At the end of the programme, a poster presentation event will be set up with academics and PGR students from the School of Engineering, Mathematics, and Physics where you will have a chance to interact with the audience and being assessed based on the quality of the poster, the level of engagement with the audience and the ability to respond to questions.</p> <p>The poster will summarise your main project achievements highlighting background, methodology, results, analysis, and conclusions. Both the poster quality and evaluative conversation will be considered when awarding the final grade.</p> <p><b>Individual Contribution Reflection:</b> To complement the team poster presentation, you will reflect on both your own and the team's performance in a written short report. Being reflective in your own practice and mindful of your operation within a team are essential skills to develop as an engineer.</p> <p>Credit is awarded on a <b>pass/fail</b> basis.</p>

## Timetable

This is an example timetable for a 2-week programme. Final timetable details will be confirmed closer to the programme start date. Each programme will consist of 40 taught hours across the 2-week timetable.

	Morning	Afternoon			Evening
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday	Arrivals and airport transfers. Settle into campus accommodation.				Evening meal
Sunday	Breakfast	Induction and orientation to UEA and Norwich.			
WEEK ONE	07:00-09:30	09:30-12:00	12:00-14:00	14:00-16:00	16:00 onwards
Monday	Breakfast	Welcome, Programme Learning Outcomes, Expectations and Engagement	Break	Academic session	Social activity
Tuesday	Breakfast	Academic session	Break	Project work	Free time
Wednesday	Breakfast	Academic session	Break	Academic session	Social activity
Thursday	Breakfast	Academic session	Break	Project work	Free time
Friday	Breakfast	Academic session	Break	Academic session	Social activity
Saturday	Cultural group excursion				
Sunday	Free time to explore Norwich or further afield.				
WEEK TWO	07:00-09:30	09:30-12:00	12:00-14:00	14:00-16:00	16:00 onwards
Monday	Breakfast	Academic session	Break	Academic session	Free time
Tuesday	Breakfast	Academic session	Break	Project work	Social activity
Wednesday	Breakfast	Academic session	Break	Mock presentations	Free time
Thursday	Breakfast	Project work	Break	Preparations for final assessment	Free time
Friday	Breakfast	Preparations for final assessment	Break	Final assessment	Finale social activity
Saturday	Breakfast	Departures / Free time			
Sunday					