

Why choose building services engineering?

Early experience validates career path choice

Engineering encompasses a wide range of disciplines and offers a unique blend of theoretical knowledge and practical applications. This article delves into the personal journey of young mechanical engineer, Finn Quinlan (below), who is currently working on an internship in Arup but is due to return to UCD this coming term to complete his masters. He outlines here why he selected engineering, sheds light on the factors that contributed to its appeal, and explains how the course experience, including internships and work experience, validate his career choice.



The decision to pursue mechanical engineering is often driven by an innate curiosity about how things work and a passion for problem-solving. The field's vast potential for innovation, its influence on various industries, and the diverse career paths it offers make it an

attractive choice for many people. I discovered my love of mechanical engineering through exposure to it in secondary school and an inherent fascination with mathematics and physics. Through various internships and college placements, I have gained some experience in the interesting

field of building services engineering and, more specifically, mechanical design.

Awareness is lacking

Building services engineering, a specialised branch of engineering, focuses on the design and operation of mechanical and electrical systems in buildings. I believe that there is little awareness of building services engineering among the first year engineering students and that it is essential for universities to provide more comprehensive information and exposure to this discipline.

The awareness and exposure of first-year engineering students to building services engineering often falls short of what is needed to fully appreciate its significance. Building services engineering plays a critical role in designing both efficient and sustainable mechanical and electrical systems for buildings, contributing to energy conservation and environmental sustainability.

By applying first principles of engineering, such as thermodynamics, fluid mechanics and heat transfer, building services engineers can optimise energy usage, improve indoor air quality, and integrate renewable energy sources.

Prioritise sustainability

Sustainability concerns, including reducing carbon emissions and achieving energy efficiency, have become increasingly important in the built environment. Therefore, it is essential for universities and educational institutions to prioritise the inclusion of building services engineering in the curriculum to equip students with the knowledge and skills necessary to address these pressing sustainability challenges.

In the context of engineering education, the learning process is often demanding and complex. It requires students to grapple with intricate concepts and problem-



solving techniques. As I engaged on this journey, I encountered some difficulties that certainly tested my determination and dedication. Engineering courses are renowned for their rigorous curriculum, and this compels students to commit significant time to their studies each semester. Despite the difficulty of the course, I have found it to be incredibly interesting and fulfilling.

There were many moments, while taking certain modules, that I thought this course isn't for me. Looking back, I realise this is all part of the course experience, and that the curriculum is so vast that it must cover topics which you won't enjoy. It is important to learn from these experiences and to utilise the university's options within the course to help shape your own experience. ■

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