

# Empowering Young Engineers in Additive Manufacturing Industry for Future Growth, Innovation and Employability



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## Project Description

This project responds directly to an identified skills and training gap for additive manufacturing. Existing university provision for the undergraduate/postgraduate level is often limited in topics and provide insufficient practical experience. Consequently, UGs and PGs may not acquire the right skills mix for the industry which has reduced employability/requires significant in-house training. For additive manufacturing (AM) various authors (Pikkareinen, 2020; Gibson 2021; Zhang 2020; Eisazadeh, 2021) have identified gaps in HEI provision concerning industry requirements. The Indian policy agenda emphasizes these applications and the need to enhance domestic capability. The “Make in India 2014” policy was launched to encourage ventures in aerospace/space exploration. The capability gap is particularly pronounced in aerospace; OEMs/Tier 1s in India currently source >70% of systems from US/EU suppliers. The proposed curriculum uses problem- and project-based pedagogies applicable at bachelor’s and master’s level (levels 5 and 7 RQF). Academics will benefit through the development of new content, identification of additive skills requirements and the potential to build an employable workforce. The industry partner is fully engaged in workforce development – the upskilling activities will be signed off by their Head of R&D – as well as identification of student research project topics.

## Products/ Instruments/ Results/ Outreach Activities (Pictures)



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**Name of the Funding Agency**  
British Council

**Name of the Scheme**  
Going Global Partnerships Industry  
Academia Grants

**Sanctioned Amount (in Rupees)**  
Rs. 40,00,000

**Duration of the Project (years)**  
1