

## **Questions to Ask Yourself: Transforming Your Course with an Entrepreneurial Engineering Lens**

As an engineering educator, integrating an entrepreneurial mindset into your teaching requires reflection on your current practices, your role, and your students' learning journey. Use the following questions as a self-assessment guide to help you shape a more entrepreneurial approach in your course design and classroom practices.

### **1. Understanding Entrepreneurship in Engineering Education**

What does entrepreneurship mean in the context of engineering education?

How do you see the connection between engineering problem-solving and entrepreneurial thinking?

Do you view entrepreneurship as starting a business, or does it also include creative problem-solving, opportunity recognition, and value creation within organizations and society?

### **2. Your Role in Shaping Entrepreneurial Behaviour**

How do you define your role in the classroom? Are you a knowledge provider, mentor, facilitator, or coach?

How do you engage students in real-world problem-solving, risk-taking, and innovation?

How do you create an environment where students can explore, experiment, and fail safely?

### **3. Current Course and Classroom Practices**

What elements of your current course structure promote entrepreneurial thinking (e.g., open-ended projects, real-world challenges, interdisciplinary collaboration)?

Do you use case studies, industry partnerships, or experiential learning to expose students to entrepreneurial engineering?

Are students encouraged to identify opportunities, prototype solutions, and engage with stakeholders?

How do you assess entrepreneurial skills, such as adaptability, initiative, and problem-solving?

### **4. Your Background and Its Influence on Your Teaching**

What is your own experience with entrepreneurship (e.g., industry work, research commercialization, startups, innovation projects)?

How has your academic and professional background shaped your approach to teaching entrepreneurship?

Do you feel confident teaching entrepreneurial skills, or do you see it as an area for development?

### **5. Your Needs and Professional Development**

What kind of knowledge, skills, or resources would help you improve your ability to teach entrepreneurial engineering?

How can you develop yourself further?

What type of support do you need from your Department, Training Centres, external programs, industry practitioners, or peer educators?

What barriers or challenges do you face in making your course more entrepreneurial?

## **6. Spaces for Entrepreneurial Behaviour in the Learning Environment**

Beyond the classroom, where can entrepreneurial behaviour emerge in students' learning journeys?

Internships and industry collaborations – Do students engage with real-world challenges and entrepreneurial ecosystems?

Master thesis and research projects – Are students encouraged to explore innovative solutions with market potential?

Hackathons, competitions, student-led initiatives – Do students have opportunities to develop and test their ideas?

Cross-disciplinary and extracurricular activities – How do students collaborate with different fields to broaden their innovation mindset?

### **Next Steps**

After reflecting on these questions, you can:

- Identify small changes you can make to integrate entrepreneurial engineering into your course.
- Seek training, peer support, or mentorship to develop your own entrepreneurial teaching skills.
- Explore partnerships with industry, startups, and research centers to bring real-world challenges into your classroom.
- Foster a culture of experimentation, creativity, and problem-solving in your students.

By continuously reflecting on these aspects, you can transform your course into a dynamic space where future engineers learn not just to solve problems, but to identify opportunities, innovate, and create impact. 🚀