Professional Engineer Program (PEP)

Introduction

Professional Engineer Program is a program designed to benefit working professionals who seek to increase their qualifications through specialized degree and professional certificate programs. As a prerequisite, the student who wants to enter this program has to at least have 2 years of working experiences in engineering field after graduated from bachelor degree of Sarjana Teknik (ST) or at least have 5 years of working experiences in engineering from Sarjana Sains (S.Si) and Sarjana Pendidikan (S.Pd) graduates. For who has at least 5 years in engineering work experiences, the student can take the program with the method of Recognition to Prior Learning (RPL), which is carried out in one semester to get the profession degree of Certified Engineer or Insinyur (Ir.). In this program, the students who hold an accredited bachelor degree have to enhance their contemporary knowledge to lead and manage their improvement of professional progress in highly competitive global environment.

As a new program in Faculty of Engineering, The Professional Engineer Program is an urgent need in Indonesia to meet the number of professional engineers' requests in many field of engineering that has been going on in Indonesia. Also, certification of the profession of engineers for Indonesian engineer is also indispensable to compete in the era of the ASEAN Economic Community (MEA), and even more to contest within the global. This program provides an availability to increase individual competence and professionalism through continuous professional development as well to get Certified Engineer. The scope of engineering disciplines in this program may cover: civil engineering and the built environment; architecture, computer engineering, chemical engineering, industrial engineering and food technology.

Vision

The most prestigious and dynamic Professional Program of Engineer in Indonesia by creating global accepted professional.

Mission

The mission of Professional Program of Engineer is to contribute to the global community through the provision of world-class education by:

1. Offering and inviting all professional practitioners to be certified in Profession Organization and eager to continuously improve professional competencies;
2. Ensuring the engineers to comply the criteria of professional development in order to maintain their professional competencies;
3. Enforcing the laws, regulation, and standard that regulate engineering practice, or the use of Engineer Profession title, in fair and consistent way.

Program Objective

The objectives of the program are:

1. To prepare students with solid technical skills and conceptual knowledge of engineering.
2. To prepare students with engineering knowledge to succeed in an engineering career.
3. To equip students with information technology knowledge that is in demand by the engineering practice.

Student Outcomes

After completing the study, graduates are:

1. Able to conduct engineering planning by using resource and conduct evaluation of engineering practice comprehensively through science and technology implementation;

2. Able to solve engineering problem through single and multidisciplinary approach;

3. Able to conduct research and make engineering decision based on engineering profession code of conduct and standard in strategic and accountable;

4. Able to implement the use of the engineering tools appropriately and effective technologies to provide added value in engineering practices.

Prospective Career of the Graduates

Due to the broad field of professions involving engineering in its implementation, the following is the areas of the profession field where the candidates work for, are eligible for PPE registration, but not limited to:

1. Higher Education and Technical Training
2. Research, Development, Assessment
3. Consultant and Construction
4. Industrial Management, Manufacturing and Processing
5. Mining and Minerals
6. Natural / Biological Resources
7. Assets Management Operation

Curriculum

Professional Engineer Program is about how to apply and implement the 'body of knowledge' of engineering in real everyday practice as a profession. The term of profession itself should, of course, meet specific professional skills to develop ways to utilize economically the materials and experience requirements for the benefit of humankind added to his academic education. The curriculum of the professional program of an engineer is structured based on professional practice point of view. Through this program, the student should master the knowledge of engineering practices and has experienced the code of conduct and ethics of engineer profession, professionalism, Occupational Safety and Health Management, seminar, engineering case study and more emphasized on engineering practice.

Course Structure

Sem	Code	Course Name	SCU	Total
1	ENGR7097017	Code of Conduct and Ethics of Engineer Profession	3	17
	ENGR7098017	Professionalism	3	
	ENGR7099017	Occupational Safety and Health Management	3	
	ENGR7100017	Engineering Practice Proposal	2	
	ENGR7101017	Artificial Intelligence for Industry	3	
	ENGR7102017	Seminar	3	
2	ENGR7103017	Engineering Practice	15	19
	ENGR7088017	Engineering Case Study	4	
			TOTAL CREDITS 36 SCU	