Bahrain Polytechnic بوليتكنك البحرين

Digital Energy Systems

This conversion program prepares for roles who are responsible for sustainable, stable, and secure energy supply, using various digital models to solve and manage the modern energy systems and minimize greenhouse gas emissions. Designed to equip the trainees with the technical expertise needed for a career in industry, for roles in analyzing and designing smart digital energy systems that harvest the power of analytics and machine learning to deliver an efficient and effective energy consumption/production. This program focusses on core areas such as digital systems, energy and sustainability, data processing/visualization and machine learning. The delivery language of the program is English.

TARGET GROUP

This program is intended for graduates that they wish to change career or develop their skills further.

BENEFITS OF ATTENDING

Upon completion of this program, the participants will be able to work as digital energy system engineers, engaging both during design & development of such systems as well during their maintenance.

COURSE CONTENTS

The program consists of:

- Energy, Environment, and Sustainable Development
- Control System Design
- Data Acquisition and Visualization
- Machine Learning

LEARNING AND TEACHING STRATEGIES

The programme is delivered using a PBL philosophy through a mixture of classroom teaching, tutorials, online (web-based), laboratory work, workshops, and supervised projects. Assessment of courses is both formative and summative, with a focus on project work. The teaching and learning methods appropriate to this programme include a wide range of different strategies to meet the needs of students and depend on the class numbers and tasks involved. These may include, but are not limited to:

- Instructive lectures
- Facilitated Discussions
- Group discussions
- Demonstrations in the classroom, laboratory, or workshop
- Tutor-directed assignments
- Tasks performed in the classroom, laboratory, or workshop
- Online exercises, tutorials, and discussion
- Projects
- Case Studies
- Videos
- Tutorials
- Visiting speakers

The teaching methods include the provision of learning experiences and opportunities that enhance the transfer of information to aid understanding, and then enable practice to take place through related tasks and the provision of opportunities to apply skills and knowledge.

CERTIFICATION

- Grading system: Achievement based
- Completion requirements: more than 60% in every course of the program.
- Attendance: 20% of the total contact hours absence is allowed.

TRAINING DURATION

The program is of 240 hours that extends over 4 months/ 15 weeks (full time) and 8 months/30 weeks (part time).

ENTRY REQUIREMENTS

Graduates with diverse backgrounds such as engineering, ICT, applied sciences with an interest in digital systems can apply.

FURTHER INFORMATION

For further information or to register in the program, please visit our webpage:

☎ 17897127
✉ learn@polytechnic.bh