Hours

LOGISTICS ENGINEERING TECHNOLOGY: BACHELOR

Overview

Program Mission

Prepare graduates to be successful as technicians and engineers embracing innovation and discovery and striving for life-long learning and professional development in the field of Logistics Engineering Technology.

Program Description

Bachelor of Logistics Engineering Technology provides an excellent broad education with specializations to cater to the global UAE logistics industry. The HCT Logistics Engineering Technology program aims to produce high-quality engineers with qualities of productivity, timeliness, dedication, and competence in the workplace. Graduates are expected to have the ability to work logically, accurately and efficiently; to gather and use information effectively; and to continue enhancing their careers through lifelong learning. Moreover, the program is designed to prepare interested students for graduate studies in logistics engineering technology and other areas of professional practice. To this end, Logistics Engineering Technology students are trained to support the analysis, design, development and improvement of logistics systems in the manufacturing and service arenas.

The Bachelor of Logistics Engineering Technology curriculum stresses the effective use of technology, information resources and engineering tools; students are trained to use state of the art software packages necessary to facilitate their efforts to analyze and optimize existing systems, and to test and validate potential gains attainable from improving the system. In addition, the program instills leadership qualities based on moral and ethical principles coupled with sound and rational judgment.

Students are eligible for a one year Work Experiential Learning experience during their study.

Program Goals

- 1. Provide logistics professionals with the technical knowledge and skills required by the industry to highest level of standards.
- Prepare graduates for a successful career as effective decision makers with strong communication and teamwork skills and an understanding of the global, ethical and social implications of engineering profession.
- Teach graduates strong commitment to lifelong learning, continuing education, and professional growth.
- Instill graduates with leadership qualities and commitment to contribute actively to their profession.

Program Learning Outcomes

Upon graduation, a HCT graduate in Bachelor of Logistics Engineering Technology should demonstrate an ability to:

 Apply knowledge, methods, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-

- defined engineering problems appropriate to Logistics Engineering Technology.
- Design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to Logistics Engineering Technology.
- Apply written, oral, and graphical communication in broadly defined technical and non-technical environments, and an ability to identify and use appropriate technical literature.
- Conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
- Function effectively as a member as well as a leader on technical teams.
- 6. Develop and evaluate a business plan to transform an engineering design (systems, products, services and solutions) into a business opportunity utilizing entrepreneurial skills and knowledge.

Requirements Completion Requirements

Bachelor of Logistics Engineering Technology

Students must successfully complete a minimum of 138 credits, including:

| Code | Title | Credit Hours |
|---------------------------------|-------------|-----------------|
| Program Co | ore Courses | 90 |
| Program Elective Courses | | 6 |
| Mathematics and Science Courses | | 9 |
| General Studies course | | 33 |
| Total Credit Hours | | 138 |
| Code | Title | Credit |

Logistics Engineering Core Courses

| Logistics Engineering Core Courses | | |
|------------------------------------|---|----|
| Required Credits: | 90 | |
| EGN 1001 | Engineering Workshop | 1 |
| EGN 1133 | Design Thinking in Technology | 3 |
| EGN 2101 | Computer Aided Drafting | 1 |
| EGN 2233 | Engineering Mechanics Fundamentals | 3 |
| EGN 2712 | Applied Programing for Engineers | 2 |
| EGN 2806 | Work Placement I | 6 |
| EGN 3012 | Project Management | 2 |
| EGN 3212 | Economics for Engineering | 2 |
| EGN 3333 | Health Safety and Environment | 3 |
| EGN 3812 | Work Placement | 12 |
| IET 2103 | Technology Innovation and Integration | 3 |
| IET 3203 | Operations Management | 3 |
| IET 3233 | Facilities Planning and Material Handling | 3 |
| IET 3303 | Operations Research | 3 |
| IET 4513 | Purchasing and Contract Management | 3 |
| IET 4523 | Warehouse and Inventory Management | 3 |
| LGE 2003 | Logistics Principles and Supply Chain Management | 3 |

| LGE 2013 | Transportation Modes | 3 |
|---------------------------------|---|---|
| LGE 2203 | Introduction to Enterprise Information | 3 |
| 202 2200 | Management | Ü |
| LGE 2313 | Managing People and Organizations | 3 |
| LGE 2902 | Sophomore Design Project | 2 |
| LGE 3203 | ERP I Principles | 3 |
| LGE 3212 | ERP II Applications | 2 |
| LGE 3413 | Sales and Distribution in Logistics | 3 |
| LGE 3503 | Accounting for Managers | 3 |
| LGE 4303 | Quality Control and Management | 3 |
| LGE 4423 | Intermodal Freight Transport | 3 |
| LGE 4543 | Simulation of Logistics Systems | 3 |
| LGE 4902 | Capstone Design Project I | 2 |
| LGE 4911 | Capstone Design Project II | 1 |
| Logistics Enginee | ring Elective Courses | |
| Required Credits: | 6 | |
| EGN 4873 | Data Analytics | 3 |
| EGN 4883 | Introduction to Artificial intelligence | 3 |
| LGE 4003 | National Transport and Planning Law | 3 |
| LGE 4013 | Hazardous Goods Management | 3 |
| LGE 4203 | GIS in Logistics | 3 |
| LGE 4313 | International Human Resource Management | 3 |
| LGE 4403 | Port Management | 3 |
| LGE 4413 | Airport Management | 3 |
| LGE 4453 | Management of Distribution Networks | 3 |
| LGE 4463 | Maritime Transport | 3 |
| LGE 4603 | Transport and Economic Geography | 3 |
| LGE 4803 | Special Topics in Logistics Engineering | 3 |
| Mathematics and | Science Required Courses | |
| Required Credits: | 9 | |
| MTH 1203 | Calculus I | 3 |
| MTH 2103 | Calculus II | 3 |
| PHY 1203 | Physics II | 3 |
| General Studies | | |
| Required Credits: | | |
| | other Languages | |
| Required Credits: | | |
| | 113, AES 1033 and LSC 2223 | |
| Humanities or Art | | |
| Required Credits: | 3 | |
| AES 1003 | | |
| | nology and Mathematics | |
| Required Credits: 6 | | |
| ICT 2013 and MTH 1113 | | |
| The Natural Sciences | | |
| Required Credits: 3 | | |
| PHY 1103 | | |
| The Social or Beh | | |
| Required Credits: | | |
| LSS 1003, LSS 1123 and BUS 2403 | | |

| Description | Data |
|---------------------------|---------|
| Total Required Credits | 138 |
| Maximum Duration of Study | 6 years |
| Minimum Duration of Study | 4 years |
| Cost Recovery Program | No |
| Program Code | BLGET |
| Major Code | LGE |

Ideal Study Plan Recommended Sequence of Study

| Year I | | |
|------------|---|-----------------|
| Semester 1 | | Credit Hours |
| EGN 1133 | Design Thinking in Technology | 3 |
| LSC 1103 | Professional Communication and Reporting | 3 |
| LSS 1003 | Life and Future Skills | 3 |
| MTH 1203 | Calculus I | 3 |
| PHY 1103 | Physics I | 3 |
| | Credit Hours | 15 |
| Semester 2 | | |
| EGN 1001 | Engineering Workshop | 1 |
| EGN 2233 | Engineering Mechanics Fundamentals | 3 |
| ICT 2013 | Computational Thinking and Coding | 3 |
| LGE 2003 | Logistics Principles and Supply Chain Management | 3 |
| MTH 1113 | Statistics for Engineering | 3 |
| PHY 1203 | Physics II | 3 |
| | Credit Hours | 16 |
| Summer | | |
| AES 1013 | Arabic Communications | 3 |
| MTH 2103 | Calculus II | 3 |
| | Credit Hours | 6 |
| Year 2 | | |
| Semester 3 | | |
| IET 2103 | Technology Innovation and Integration | 3 |
| IET 3233 | Facilities Planning and Material Handling | 3 |
| LGE 2013 | Transportation Modes | 3 |
| LGE 2203 | Introduction to Enterprise Information Management | 3 |
| LGE 2313 | Managing People and Organizations | 3 |
| | Credit Hours | 15 |
| Semester 4 | | |
| EGN 2101 | Computer Aided Drafting | 1 |
| EGN 3333 | Health Safety and Environment | 3 |
| IET 3203 | Operations Management | 3 |
| IET 4523 | Warehouse and Inventory Management | 3 |
| LGE 2902 | Sophomore Design Project | 2 |
| LGE 3503 | Accounting for Managers | 3 |
| | Credit Hours | 15 |
| Summer | | |
| EGN 2806 | Work Placement I | 6 |
| | Credit Hours | 6 |
| Year 3 | | |
| Semester 5 | | |
| AES 1033 | Islamic Culture | 3 |
| EGN 2712 | Applied Programing for Engineers | 2 |
| IET 4513 | Purchasing and Contract Management | 3 |
| LGE 3203 | ERP I Principles | 3 |
| LSS 1123 | Basic Research Methods | 3 |
| | Credit Hours | 14 |

| Semester 6 | | |
|-------------------|-------------------------------------|-----|
| EGN 3012 | Project Management | 2 |
| EGN 3212 | Economics for Engineering | 2 |
| EGN 3812 | Work Placement | 12 |
| | Credit Hours | 16 |
| Summer | | |
| AES 1003 | Emirati Studies | 3 |
| LSC 2223 | Future Skills Capstone | 3 |
| | Credit Hours | 6 |
| Year 4 | | |
| Semester 7 | | |
| BUS 2403 | Innovation and Entrepreneurship | 3 |
| LGE 3212 | ERP II Applications | 2 |
| LGE 3413 | Sales and Distribution in Logistics | 3 |
| LGE 4303 | Quality Control and Management | 3 |
| LGE 4902 | Capstone Design Project I | 2 |
| 1 Elective Course | | 3 |
| | Credit Hours | 16 |
| Semester 8 | | |
| IET 3303 | Operations Research | 3 |
| LGE 4423 | Intermodal Freight Transport | 3 |
| LGE 4543 | Simulation of Logistics Systems | 3 |
| LGE 4911 | Capstone Design Project II | 1 |
| 1 Elective Course | | 3 |
| | Credit Hours | 13 |
| | Total Credit Hours | 138 |

Faculty and Academic Staff Abu Dhabi Men's

Hussni Al Hajjar, Doctorate (Management Information Systems), University of Bradford, United Kingdom

Katerina Mitkovska Trendova, Doctor of Technical Sciences (Industrial Engineering and Management), University Ss. Cyril and Methodius, Macedonia

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