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.
2. 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.
3. Teach graduates strong commitment to lifelong learning, continuing education, and professional growth.
4. 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:

1. 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.
2. Design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to Logistics Engineering Technology.
3. Apply written, oral, and graphical communication in broadly defined technical and non-technical environments, and an ability to identify and use appropriate technical literature.
4. Conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
5. 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 132 credits, including:

Code	Title	Credit Hours
Program Core Courses		84
Program Elective Courses		6
Mathematics and Science Courses		9
General Studies course		33
Total Credit Hours		**132**

Code	Title	Credit Hours
Logistics Engineering Core Courses		
Required Credits: 84		
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 2803	Work Placement I	3
EGN 3012	Project Management	2
EGN 3212	Economics for Engineering	2
EGN 3333	Health Safety and Environment	3
EGN 3803	Work Placement II	3
EGN 4873	Data Analytics	3
EGN 4883	Introduction to Artificial intelligence	3
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 Management	3
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 Engineering Elective Courses		
Required Credits: 6		
IET 4563	Supply Chain Strategy and Management	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 of Electricity and Magnetism	3
General Studies		
Required Credits: 33		
English, Arabic or other Languages		
Required Credits: 12		
LSC 1103, AES 1013, AES 1033 and LSC 2193		
Humanities or Art		
Required Credits: 3		
AES 1003		
Information Technology and Mathematics		
Required Credits: 6		
ICT 2013 and MTH 1113		
The Natural Sciences		
Required Credits: 3		
PHY 1103		
The Social or Behavioral Sciences		
Required Credits: 9		
LSS 1003, LSS 1123 and BUS 2403		

Description	Data
Total Required Credits	132
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 1

Semester 1		**Credit Hours**
AES 1003	Emirati Studies	3
LSC 1103	Professional Communication and Reporting	3
EGN 1133	Design Thinking in Technology	3
MTH 1203	Calculus I	3
PHY 1103	Physics of Mechanics and Motion	3
	Credit Hours	**15**
Semester 2		
EGN 1001	Engineering Workshop	1
ICT 2013	Computational Thinking and Coding	3
LSS 1003	Life and Future Skills	3
MTH 1113	Statistics for Engineering	3
MTH 2103	Calculus II	3
PHY 1203	Physics of Electricity and Magnetism	3
	Credit Hours	**16**

Year 2

Semester 3		
EGN 2101	Computer Aided Drafting	1
EGN 2233	Engineering Mechanics Fundamentals	3
IET 2103	Technology Innovation and Integration	3
LGE 2003	Logistics Principles and Supply Chain Management	3
LGE 2203	Introduction to Enterprise Information Management	3
LSS 1123	Basic Research Methods	3
	Credit Hours	**16**
Semester 4		
EGN 2712	Applied Programing for Engineers	2
EGN 3212	Economics for Engineering	2
EGN 3333	Health Safety and Environment	3
LGE 2013	Transportation Modes	3
LGE 2313	Managing People and Organizations	3
LGE 2902	Sophomore Design Project	2
	Credit Hours	**15**
Summer		
EGN 2803	Work Placement I	3
	Credit Hours	**3**

Year 3

Semester 5		
BUS 2403	Innovation and Entrepreneurship	3
EGN 4873	Data Analytics	3
IET 3203	Operations Management	3
IET 3233	Facilities Planning and Material Handling	3
LSC 2193	Applied Skills Capstone	3
LGE 3203	ERP I Principles	3
	Credit Hours	**18**
Semester 6		
EGN 3012	Project Management	2
EGN 4883	Introduction to Artificial intelligence	3

IET 4513	Purchasing and Contract Management	3
IET 4523	Warehouse and Inventory Management	3
LGE 3212	ERP II Applications	2
LGE 3503	Accounting for Managers	3
	Credit Hours	**16**
Summer		
EGN 3803	Work Placement II	3
	Credit Hours	**3**
Year 4		
Semester 7		
AES 1033	Islamic Culture	3
IET 3303	Operations Research	3
LGE 3413	Sales and Distribution in Logistics	3
LGE 4902	Capstone Design Project I	2
1 Elective Course		3
	Credit Hours	**14**
Semester 8		
AES 1013	Arabic Communications	3
LGE 4303	Quality Control and Management	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	**16**
	Total Credit Hours	**132**

Faculty and Academic Staff

Abu Dhabi Men's

Hussni Farouk Al Hajjar, Doctorate in Philosophy (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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