

# LOGISTICS ENGINEERING TECHNOLOGY (BLGET): BACHELOR

## Overview

Bachelor of Logistics Engineering Technology (BLGET)

## 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 will have the option to graduate with a Diploma in Logistics Engineering Technology upon the successful completion of 81 credits inclusive of the 8 week Work Placement.

## 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:

1. 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;
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to Logistics Engineering Technology;
3. An ability to 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. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes
5. An ability to function effectively as a member as well as a leader on technical teams.
6. An ability to 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

Students seeking the Bachelor of Logistics Engineering Technology degree must successfully complete the following minimum requirements:

1. A minimum of 146 credits, as follows:
  - a. A minimum requirement of 95 credits of the program major as follows:
    - i. a minimum of 83 core courses including Work Placement for 16 weeks
    - ii. a minimum of 12 credits of program major electives.
  - b. A minimum requirement of 18 credits in Math and Science courses.
  - c. A minimum requirement of 33 credits in General Studies according to the General Studies breakdown and as advised in the study plan of the program.
2. A minimum CGPA of 2.00.

Code	Title	Credit Hours
<b>Logistics Engineering Core Courses</b>		
Required Credits: 83		
EGN 1133	Design Thinking in Technology	3
EGN 2101	Computer Aided Drafting	1
EGN 2233	Engineering Mechanic 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 3806	Work Placement II	6

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: 12

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
LGE 4893	Directed Study	3
MAR 4703	Shipping Management	3

**Mathematics and Science Required Courses**

Required Credits: 18

CHM 1103	Engineering Chemistry	3
MTH 1103	Pre Calculus	3
MTH 1203	Calculus I	3
MTH 2103	Calculus II	3
MTH 2503	Introduction to Differential Equations	3
PHY 1203	Physics II	3

**General Studies**

Required Credits: 33

**English, Arabic or other Languages**

Required Credits: 12

**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

Description	Data
Total Required Credits	146
Maximum Duration of Study	6 years
Cost Recovery Program	No
Minimum Duration of Study	4 years
Program Code	BLGET
Major Code	LGE

## Ideal Study Plan

### Recommended Sequence of Study

**Year 1****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 1103	Pre Calculus	3
PHY 1103	Physics I	3
Credit Hours		15

**Semester 2**

LSC 2103	Academic Reading and Writing II	3
LSS 1123	Basic Research Methods	3
MTH 1113	Statistics for Engineering	3
MTH 1203	Calculus I	3
PHY 1203	Physics II	3
Credit Hours		15

**Summer**

AES 1013	Arabic Communications I	3
CHM 1103	Engineering Chemistry	3
Credit Hours		6

**Year 2****Semester 1**

AES 1003	Emirati Studies	3
EGN 2101	Computer Aided Drafting	1
EGN 2233	Engineering Mechanic Fundamentals	3
LGE 2003	Logistics Principles and Supply Chain Management	3
LGE 2203	Introduction to Enterprise Information Management	3
MTH 2103	Calculus II	3
Credit Hours		16

**Semester 2**

EGN 3333	Health Safety and Environment	3
ICT 2013	Computational Thinking and Coding	3
IET 2103	Technology Innovation and Integration	3
LGE 2013	Transportation Modes	3
LGE 2313	Managing People and Organizations	3
LGE 2902	Sophomore Design Project	2
Credit Hours		17

**Summer**

EGN 2806	Work Placement I *	6
IET 3233	Facilities Planning and Material Handling	3

IET 4523	Warehouse and Inventory Management	3
	Credit Hours	12
<b>Year 3</b>		
<b>Semester 1</b>		
IET 3203	Operations Management	3
IET 3303	Operations Research	3
IET 4513	Purchasing and Contract Management	3
LGE 3203	ERP I Principles	3
MTH 2503	Introduction to Differential Equations	3
	Credit Hours	15
<b>Semester 2</b>		
EGN 2712	Applied Programing for Engineers	2
EGN 3012	Project Management	2
LGE 3212	ERP II Applications	2
LGE 3413	Sales and Distribution in Logistics	3
LGE 3503	Accounting for Managers	3
BUS 2403	Innovation and Entrepreneurship	3
	Credit Hours	15
<b>Summer</b>		
EGN 3806	Work Placement II	6
	Credit Hours	6
<b>Year 4</b>		
<b>Semester 1</b>		
AES 3003	Professional Arabic	3
EGN 3212	Economics for Engineering	2
LGE 4423	Intermodal Freight Transport	3
LGE 4902	Capstone Design Project I	2
2 Elective Courses		6
	Credit Hours	16
<b>Semester 2</b>		
LGE 4303	Quality Control and Management	3
LGE 4543	Simulation of Logistics Systems	3
LGE 4911	Capstone Design Project II	1
2 Elective Courses		6
	Credit Hours	13
	Total Credit Hours	146

\*Work Placement I shall start after year 2 Summer Semester is completed.

## Faculty and Academic Staff

### Abu Dhabi Men's

**Amol Gore**, PhD Industrial Engineering, University of Oulu, Finland

**Hussni Al Hajjar**, PhD Mechanical Engineering (MBCM-MIS), University of Bradford, UK

**Katerina Mitkovska-Trendova**, PhD Industrial Engineering and Management, Ss. Cyril and Methodius University, Republic of Macedonia

**Zafer Bukey**, Masters Operational Research and Management Information System, University of Toronto, Canada