

Course ILOs for Approved Common Core Courses (Subject Code: **CENG**)

Course Code, Title and Course ILOs	Weighting	Area(s)
CENG 1500 A First Course on Materials Science and Applications		S&T
CILO 1 Describe the basic structures and properties of materials used in our daily life, and discuss the novel applications of selected advanced materials	NA	
CILO 2 Understand basic techniques for measuring the common properties of materials, and for fabricating and processing of novel materials	NA	
CILO 3 Evaluate the social, economical, and environmental impact of materials	NA	
CENG 1600 Biotechnology and Its Business Opportunities		S&T
CILO 1 Explain the basic technical concepts, scientific and engineering principles in medical biotechnology	NA	
CILO 2 Describe the opportunities and challenges faced by the industry	NA	
CILO 3 Analyze the potential and impact of modern biotechnology on human health and economy	NA	
CILO 4 Identify the key components contributing to biotechnology of commercial interest	NA	
CILO 5 Research topics in biotechnology and its current development	NA	
CILO 6 Communicate technical ideas effectively	NA	
CILO 7 Develop ability work in a team with complementary strengths	NA	
CENG 1700 Introduction to Environmental Engineering		S&T
CILO 1 Apply data collection and analysis skills in environmental impact assessment and life cycle analysis	25%	
CILO 2 Comprehend and apply the basic principles of environmental engineering in pollution control	50%	
CILO 3 Function effectively in multi-cultural and multi-disciplinary teams	5%	
CILO 4 Communicate and present key environmental issues and their solutions effectively	10%	
CILO 5 Pursue lifelong learning as self-regulated learners	5%	
CILO 6 Apply ethics in environmental quality control and improvement as responsible citizens and decision makers	5%	
CENG 1800 Introduction to Food Science and Technology		S&T
CILO 1 Identify the major nutrients and chemical components in different food products, and how they meet body's needs	20%	
CILO 2 Understand the principle and operation of food related systems, and the physical or chemical methods used in food processing, preservation and production	20%	
CILO 3 Appreciate importance of safe, sustainable and economical practices when developing and using relevant technologies	15%	
CILO 4 Obtain hands-on experience on food processing through experiments	20%	

CILO 5	Design a food product, process or facility by incorporating food science, technology, safety, and economical aspects	15%	
CILO 6	Critically examine the contemporary issues related to food	10%	

NA : The course offering unit has not assigned any weighting for the course ILOs.

Updated as at 25 May 2017