# [ CHED MEMORANDUM ORDER (CMO) NO. 01 SERIES OF 2012, January 24, 2012 ]

# MODEL EMBEDMENT OF TVET COMPETENCIES/QUALIFICATIONS IN THE LADDERIZED BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING PROGRAM

SUBJECT MODEL EMBEDMENT OF TVET COMPETENCIES/QUALIFICATIONS

IN THE LADDERIZED BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING PROGRAM

In accordance with the pertinent provisions of Republic Act (RA) No. 7722, otherwise known as the "Higher Education Act of 1994," Executive Order 358-2004 "Institutionalizing a Ladderized interface between Technical Vocational Education Training (TVET) and Higher Education (HE), and by virtue of CEB Resolution No. 328-2011, dated December 16, 2011, the model embedment of Technical and Vocational Education and Training (TVET) Competencies/Qualifications, contained in appropriate TVET Training Regulations (TRs), in the Ladderized Bachelor of Science in Mechanical Engineering program is hereby adopted and promulgated by this Commission.

#### **ARTICLE I**

#### **AUTHORITY TO OPERATE**

#### **SECTION 1. Authority to Operate**

All Private Higher Education Institutions (PHEIs) with recognized Bachelor of Science in Mechanical Engineering (BSME) program granted by the Commission on Higher Education (CHED) and by the respective Governing Boards in the case of chartered State Universities and Colleges (SUCs), and Local Colleges and Universities (LCUs) intending to offer the ladderized BSME shall submit to CHED the necessary documents required by CMO No. 43 series 2008 - "Implementing Guidelines of Executive Order No. 694 entitled "Enabling Higher Education Institutions to Opt to Ladderize their Education Programs Without Need for Issuance of Permit from the Commission on Higher Education and the Technical Education and Skills Development Authority."

#### **ARTICLE II**

#### **MODEL CURRICULUM**

#### **SEC. 2. Curriculum Description**

The model BSME curriculum with embedded TVET qualifications shall be adopted as the minimum requirement and shall be built as prescribed in "CMO 09, s. 2008-Policies and Standards for Bachelor of Science in Mechanical Engineering Program" for the completion of the ladderized BSME program. The TVET qualifications embedded in this curriculum include but are not limited to the following:

	TVET Qualification/s
Track 1:	
	Automotive Servicing NC I
	Automotive Servicing NC II
Track 2:	
ITACK Z.	DAG 0 NO 7
	RAC Servicing NC I
	RAC Servicing NC II
Track 3:	
	Gas Welding NCI
	Gas Welding NC II
Track 4:	
	Machining NC I
	Machining NC II
Track Eu	
Track 5:	
	Tool and Die Making NC II
Track 6:	
Shiel	ded Metal Arc Welding (SMAW) NC I

# **SEC. 3. Curriculum Outline**

The curriculum outline is divided into five (5) components namely: General Education Courses, General Engineering Courses, Basic Mechanical Engineering Courses, Professional Mechanical Courses, and Practicum/Work Integrated Learning.

Identified relevant TVET Competencies/ Qualifications for BS Mechanical Engineering are embedded in General Education and Basic Mechanical Engineering Courses.

### **SEC. 4. Enrichment of Model Curriculum**

The HEI intending to offer the ladderized BSME program may enrich the sample/ model program of study depending on the needs of the industry, provided that all prescribed courses with corresponding pre-requisites/co-requisites in the curriculum outline are complied with. Please refer to the five Attachments.

## **ARTICLE III**

#### **REQUIREMENTS**

# **SEC. 5. Faculty Qualifications and Other Requirements**

The general requirements for the Bachelor of Science in Mechanical Engineering Program are contained in CMO 09, s. 2008.