

State of Maryland Department of Labor Board for Professional Engineers 100 S. Charles St., Tower 1 Baltimore, Maryland 21201 (410) 230-6010

## **Curriculum Checklist Form**

Complete the info	ormation below the	en read the delivery instructions a	at the bottom of th	is form.
YOUR NAME:				2
	Last	First		M.I.
<b>EXAM TYPE:</b>	P.E	F.E		
You must complet	e this form if you h	ave:		
<ol> <li>A 4-year engine university in the U</li> <li>A degree from a</li> <li>Any other unap</li> </ol>	eering technology d (.S.; a foreign institution proved degree.	a college/university in the U.S. that legree (either approved or unapproval; or; PLICATION IS BASED ON EXPER	ed by TAC/ABET)	* *
A. Name of Colle	ge(s)/University(id	es)	Degree	Graduation Date
1.	74.00			
2.				
3.				
4.				
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An engineering curriculum of 4 scholastic years or more should consist of at least:

- 1. 15 semester hours in mathematics which shall include differential calculus, integral calculus, and differential equations;
- 2. 15 semester-hours of instruction in basis sciences which shall include general chemistry and general physics with calculus;
- 3. 30 semester-hours of instruction in engineering subjects, which shall include a course, project, or thesis that focuses upon engineering design,
- 4. 15 semester-hours of instruction in advanced mathematics, basis science, or engineering.

The following sections are to be used to list courses in each of the four categories above.

# **SECTION B.** 15 semester hours in **MATHEMATICS** which shall include differential calculus, integral calculus, and differential equations

COLLEGE NO. FROM SEC. A	COURSE NAME	COURSE NUMBER	COURSE CONTENT/ DESCRIPTION	CREDIT HOURS SEMESTER Q	)TR
SEC. II					
			TOTAL		
			TOTAL		

# **SECTION C.** 15 semester hours in **BASIC SCIENCES** which shall include general chemistry and general physics with calculus

COLLEGE NO. FROM SEC. A	COURSE NAME	COURSE NUMBER	COURSE CONTENT/ DESCRIPTION	CREDIT HOUR	
			TOTAL		
			IOIM		

### **SECTION D. 30** semester hours in **ENGINEERING SUBJECTS** which shall:

- (1) Include a course, project, or thesis that focuses upon engineering design (indicate with a \*);
- (2) Incorporate hands on quantitative laboratory work correlated with the science and design instruction (indicate with \*\*);
- (3) For graduation subsequent to 1975, include at least one high level computer language such as FORTRAN or PASCAL, C/C++, or MATLAB so that the student is able to compose computer programs to solve problems in science and design (indicate with \*\*\*);
- (4) demonstrate familiarity with probability, statistics, and linear algebra (indicate with \*\*\*\*).

Engineering courses shall be selected subject areas such as:

Biochemistry, Biophysics & Biometrics Computer Science Electrical, Electronic & Computer Engineering engineering Design Finite Element Analysis Geochemistry & Geophysics Physical, Organic & Inorganic Chemistry Sanitary & Environmental Engineering

Civil & Structural Engineering Digital Signals & Systems Electrodynamics **Engineering Economics** Fluid Mechanics, Hydraulics, & Gas Dynamics Materials Science

COLLEGE	COURSE NAME	COURSE	COURSE CONTENT/	CREDIT HOURS	
NO. FROM		NUMBER	DESCRIPTION	SEMESTER QTR	
SEC. A					

SECTION E. 15 semester credit hours in advanced courses in mathematics, science or engineering

COLLEGE NO. FROM SEC. A	COURSE NAME	COURSE NUMBER	COURSE CONTENT/ DESCRIPTION	CREDIT HOURS SEMESTER QTR	
			TOTAL		

**<u>INSTRUCTIONS:</u>** Send the completed form via one of the following options:

- **1)** Email to DLOPLPERFirm-LABOR@maryland.gov; or
- 2) Mail to Board for Professional Engineers, 100 S. Charles Street, Tower 1, Baltimore, MD 21201

### INSTRUCTIONS FOR COMPLETING CURRICULUM CHECKLIST FORM

You must complete this form if you are applying with a non-EAC/ABET approved 4 year engineering degree in the U.S.; 4 year engineering technology degree (approved or unapproved by TAC/ABET) in the U.S.; a foreign degree; or, any other unapproved degree. \*FORM IS NOT REQUIRED IF APPLICATION IS BASED ON EXPERIENCE ALONE.

For each unapproved institution not located in the U.S., you must provide an official course-by-course evaluation sent directly from the evaluation company to the Board's office. See <a href="www.ncees.org">www.ncees.org</a> or <a href="www.naces.org">www.naces.org</a> for a list of evaluation companies. The Board will only accept evaluations from companies that obtain transcripts directly from the institution.

**SECTION A -** List the names of the colleges/universities you attended, and the degree(s) earned and date(s) awarded. In SECTIONS B, C and D in the first column boxes denote the college/university by the number assigned to it in Box A.

**SECTION B** - Enter the information about mathematics courses taken, totaling at least 15 semester credit hours. Relevant courses should include differential calculus, integral calculus and differential equations, and should be described as such in the course content column.

**SECTION C** - Enter information about basic sciences courses taken, totaling 15 semester credit hours. Relevant courses should include general chemistry and physics with calculus, and should be described as such in the course content column.

#### SECTION D

Enter information about engineering courses taken, totaling at least 30 semester credit hours. These courses should:

- 1. Include a course, project or thesis focusing on engineering design (indicate with \*).
- 2. Incorporate hands-on quantitative laboratory work correlated with the science and design instruction (indicate with \*\*).
- 3. For graduation subsequent to 1975, include at least one high level computer language such as FORTRAN or PASCAL so that the student is able to compose computer programs to solve problems in science and design (indicate with \*\*\*).
- 4. Demonstrate familiarity with probability, statistics and linear algebra (indicate with \*\*\*\*).

**Engineering courses** shall be in selected subject areas such as:

Biochemistry, Biophysics & Biomechanics

Computer Science

Electrical, Electronic & Computer Engineering

**Engineering Design** 

Finite Element Analysis

Geochemistry & Geophysics

Physical, Organic & Inorganic Chemistry

Transient Analysis & Feedback Control

Solid State Physics, Nuclear Physics, Quantum Optics

Strength of Materials

Civil & Structural Engineering

Digital Signals & Systems

Electrodynamics

**Engineering Economics** 

Fluid Mechanics, Hydraulics, & Gas Dynamics

Materials Science

Sanitary & Environmental Engineering

Transfer & Transport Phenomena

Statics and Dynamics

Thermodynamics

**SECTION E -** Provide the information requested about advanced courses in mathematics, science or engineering, totaling 15 semester hours.