

State of Maryland Department of Labor Board for Professional Engineers 1100 N. Eutaw St., Room 121 Baltimore, Maryland 21201 (410) 230-6010

## **Curriculum Checklist Form**

| Complete the info                                            | ormation below then                        | read the delivery instructions at the b                                         | ottom of this form. |
|--------------------------------------------------------------|--------------------------------------------|---------------------------------------------------------------------------------|---------------------|
| YOUR NAME:                                                   |                                            |                                                                                 |                     |
| -                                                            | Last                                       | First                                                                           | M.I.                |
| EXAM TYPE:                                                   | P.E                                        | <b>F.E.</b>                                                                     |                     |
| You must complet                                             | e this form if you have                    | e:                                                                              |                     |
| university in the U<br>3. A degree from<br>4. Any other unap | S.; a foreign institution; oproved degree. | ree (either approved or unapproved by T<br>or;<br>CATION IS BASED ON EXPERIENCI | ,                   |
| A. Name of Colle                                             | ege(s)/University(ies)                     | Degre                                                                           | ee Graduation Date  |
| 1.                                                           | •                                          |                                                                                 |                     |
| 2.                                                           |                                            |                                                                                 |                     |
| 3.                                                           |                                            |                                                                                 |                     |
| 4.                                                           |                                            |                                                                                 |                     |

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<br>NO.<br>FROM<br>SEC. A | COURSE NAME | COURSE<br>NUMBER | COURSE CONTENT/<br>DESCRIPTION | CREDIT HOURS SEMESTER QTR |
|----------------------------------|-------------|------------------|--------------------------------|---------------------------|
|                                  |             |                  |                                |                           |
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**SECTION C.** 15 semester hours in **BASIC SCIENCES** which shall include general chemistry and general physics with calculus

| COLLEGE<br>NO.<br>FROM<br>SEC. A | COURSE NAME | COURSE<br>NUMBER | COURSE CONTENT/<br>DESCRIPTION | CREDIT HOUR SEMESTE |  |
|----------------------------------|-------------|------------------|--------------------------------|---------------------|--|
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## **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

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

| COLLEGE<br>NO.<br>FROM<br>SEC. A | COURSE NAME | COURSE<br>NUMBER | COURSE CONTENT/<br>DESCRIPTION | CREDIT HOURS SEMESTER QTR |
|----------------------------------|-------------|------------------|--------------------------------|---------------------------|
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**SECTION E.** 15 semester credit hours in advanced courses in mathematics, science or engineering

| COLLEGE<br>NO.<br>FROM<br>SEC. A | COURSE NAME | COURSE<br>NUMBER | COURSE CONTENT/<br>DESCRIPTION | CREDIT HOURS SEMESTER QTR |  |
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**INSTRUCTIONS:** Send the completed form via one of the following options:

- 1) Email to DLOPLPERFirm-LABOR@maryland.gov; or
- **2)** Fax to 410-962-8483; or
- **3)** Mail to Board for Professional Engineers, 1100 N. Eutaw Street, Room 121, 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 Civil & Structural Engineering

Computer Science Digital Signals & Systems

Electrical, Electronic & Computer Engineering Electrodynamics
Engineering Design Engineering Economics

Finite Element Analysis Fluid Mechanics, Hydraulics, & Gas Dynamics

Geochemistry & Geophysics Materials Science

Physical, Organic & Inorganic Chemistry

Transient Analysis & Feedback Control

Transfer & Transport Phenomena

Solid State Physics, Nuclear Physics, Quantum Optics Statics and Dynamics Strength of Materials Thermodynamics

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