

TOOL DESIGNER

Curriculum Guide for Academic Year 2011-2012

Table of Contents

Associate in Science Degree, p. 1
 Certificate of Achievement, p. 2
 Recommended, but not required, classes, p. 2
 Career Opportunities, p. 2
 Program Mission and Outcomes, p. 2
 Legend, p. 2

Students planning to **transfer** to a four-year college or university should refer to the ASSIST web site at www.assist.org and **consult a counselor** before beginning a program of study. To set up an appointment with a counselor, please call 562-938-4561 for the LAC or (562) 938-3920 for PCC. Students may also wish to visit the Transfer Center on either campus.

Program of study leading to: Associate in Science (A.S.) Degree			
<u>REQUIRED COURSES (LEVEL 1)</u>		UNITS	In Progress Completed Grade
AMECH 50A	Machine Tool Operation and Practices	3	<input type="text"/>
DRAFT 201 OR	Introduction to Drafting OR	4 OR	<input type="text"/>
DRAFT 51A	Industrial Drafting I	3	<input type="text"/>
ELECT 202 OR	Electrical Mathematics OR * A more advanced or transferable math course (Trigonometry is recommended)	3-4	<input type="text"/>
† SHMET 220A	Basic Sheet Metal Layout & Fabrication	4	<input type="text"/>
*			<input type="text"/>
Subtotal Units		13-15	<input type="text"/>
<u>REQUIRED COURSES (LEVEL 2):</u>		UNITS	
† DRAFT 51B	Industrial Drafting II	3	<input type="text"/>
† DRAFT 60	Geometric Dimensioning and Tolerancing	3	<input type="text"/>
TEC 60AD	Computer Aided Design and Drafting (CADD)	3	<input type="text"/>
Subtotal Units		9	<input type="text"/>
TOTAL UNITS		22-24	<input type="text"/>

For graduation with an **Associate in Science (A.S.) Degree with a major in Tool Designer:**

- Units:** Complete a minimum of 60 units, distributed as follows:

Tool Designer Major:	22 – 24	units
General Education/A.S.	19	units
Electives/Other courses:	17 – 19	units
TOTAL:	60	units
- Scholarship:** Maintain an **overall grade point average (GPA) of 2.0** ("C" average) based on all accredited college work applied to the degree, no matter where completed. For this **field of concentration, complete each course above with a grade of "C" or better**, or "P" if course is graded on a P/NP basis.
- Residence for the Degree:** Complete at least 30 units of the required 60 in residence at LBCC, or complete in residence at LBCC at least 20 units within the last 30 units of work applied to the degree.
- Residence for the Field of Concentration:** Complete fifty percent (50%) or more of the unit requirements for this field of concentration in residence; this means at **least 12 – 13 units** of the required 23 – 25 must be **completed at Long Beach City College**. Credit earned by exam, where applicable, may be included.

Associate Degree requirements continued from the previous page.

5. **General Education and Proficiency Requirements:** Complete the required A.A./A.S. General Education and Proficiency requirements*, otherwise known as "Plan A". For Plan A requirements, refer to the general catalog or view it online at <http://osca.lbcc.edu>.
6. Complete and submit the degree application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at <http://admissions.lbcc.edu/>. Refer to the Schedule of Classes (<http://schedule.lbcc.edu>) and click the "Important Dates" link to view the actual deadline for each semester.

*The requirements for general education/proficiency and the field of concentration (major) need to be from the same catalog year. This catalog year may be any year between the year of initial enrollment to the present, provided continuous enrollment is maintained throughout. See the catalog for definition of "continuous enrollment".

Unless otherwise noted, "double-counting" is not allowed. That is, one course may not be used to fulfill both a field of concentration requirement and to fulfill a general education requirement.

**Program of study leading to:
Certificate of Achievement**

REQUIRED COURSES—Complete the 23 – 25 units of required courses as listed in the Associate Degree requirements box on the first page.

<u>REQUIRED COURSES</u>	In Progress	Completed
TOTAL UNITS 22 – 24	<input style="width: 50px; height: 20px;" type="text"/>	<input style="width: 50px; height: 20px;" type="text"/>

For graduation with a **Tool Designer Certificate of Achievement:**

1. Complete each of the **REQUIRED COURSES** listed above with a **minimum grade of "C"** or better, or "P" of course is graded on a P/NP basis.
2. Complete fifty percent (50%) or more of the unit requirements for this field of concentration in residence; this means at **least 12 – 13 units** of the required 23 – 25 must be **completed at Long Beach City College**. Credit earned by exam, where applicable, may be included.
3. Complete and submit the certificate application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at <http://admissions.lbcc.edu/>. Refer to the Schedule of Classes (<http://schedule.lbcc.edu>) and click the "Important Dates" link to view the actual deadline for each semester.

For the **Associate in Arts** degree, the following courses are recommended, **BUT ARE NOT REQUIRED.**

RECOMMENDED but not required courses:

DRAFT 273	Work Experience – Mechanical Design	4	<input style="width: 50px; height: 20px;" type="text"/>
TEC 60AD	Computer Aided Design & Drafting (CADD)	3	<input style="width: 50px; height: 20px;" type="text"/>

Career Opportunities

Students prepare for entry-level positions as tool designers in the aerospace or comparable manufacturing industry. Tool designers generate conceptual designs for tools in conformance with defined current tooling engineering standards and practices. Tool designers plan the sequence of operations necessary to layout, fabricate and assemble cost effective tooling.

Program Mission and Outcomes

The Program Mission Statement and Outcomes for the Tool Designer program is unavailable at this time. Please contact the department for further information.

Legend

† This course has a prerequisite; prerequisite courses must be completed with at least a "C" or "P" grade (see catalog or schedule of classes).

* This course is an exception to the "double-counting" rule; it may be double-counted.