

**Common Course Outline**  
**DFAB 202**  
**Manufacturing Strategies & Technology Commercialization**  
**3 Credits**

**Community College of Baltimore County**

**Description**

**DFAB 202 – Manufacturing Strategies & Technology Commercialization** explores practices such as LEAN and green manufacturing, including strategies to streamline fabrication processes and minimize “time to market,” including distribution and production planning. Inherent in a “time to market” strategy are also the issues of product development planning and technology commercialization. Topics such as patents and licensing, intellectual property law, pursuing venture capital (including proformas and business plans) and incorporation are included. The related impact of liability, social consciousness and environmental stewardship are threaded throughout the content.

**3 Credits**

**Prerequisites:** DFAB 101 or the consent of the program coordinator.

**Overall Course Objectives**

Upon completion of this course students will be able to:

1. identify and apply salient strategies for product development/“time-to-market,” technology commercialization and production/distribution/operations;
2. explain what industry’s obligations are, both ethically and legally, to environmental stewardship, regulation compliance and social responsibility;
3. identify strategies for reducing waste, cost and time;
4. complete a simple and effective proforma/business plan (including Cost/Benefit models), production plan and distribution plan;
5. successfully pursue a patent/license/trademark/copyright and incorporation;
6. apply intellectual property law, as appropriate and necessary; and
7. analyze case studies, and recommend resolution strategies for real-world applications.

**Major Topics**

- I. Lean/Green Operations
- II. Streamlined Production & Product Development
- III. Technology Commercialization
- IV. Intellectual Property Issues
- V. Incorporation/Patents/Trademarks/Copyrights
- VI. Business Plans
- VII. Venture Capital
- VIII. Production & Distribution Planning

## **Course Requirements**

### **Grading/Exams:**

Grading procedures will be determined by the individual faculty member and will be provided on the first day of class. The following will be required for this course:

Minimum of three comprehensive case studies resulting in substantive deliverables, at least one of which will be an industry assignment to support an actual operational issue in a manufacturing-related organization. Students are required to utilize appropriate academic resources.

### **Other Course Information**

This course is a Design, Fabrication, & Advanced Manufacturing core course, and an elective for other degree programs.