

# 7140 Course Description

**Course Name:** IB Design-Technology SL2 (Honors)

**Course Number:** SCI 7140

**Brief Course Overview:** : This is the second year of a two-year IB Standard Level course.

IB Design Technology (also referred to as “Design Tech”) is a two-year course targeted at prospective designers, engineer and artists. The design cycle model is at the core of the course—a fundamental concept underpinning the design process, and central to a student’s understanding of design activities. Students conclude their two-year course with a Major Design Project in their senior year that requires students to invent a product or service to solve a problem that they choose at the end of the first year.

This is a two-year IB course with required formal assessments and end-of-course exams. Students enrolled in IB courses will be assessed an annual registration fee by the IBO. For full Diploma candidates, this is a one-time fee. The registration fee is separate from the fee assessed for each IB subject..

## **Main Topics of Study:**

Core syllabus topics taught at the Standard Level include:

- The Design Process
- Product Design and Product Innovation
- Green Design
- Materials
- Manufacturing Processes
- Product Development and Evaluation Strategies

## **What are the Enduring Understandings of the course?**

- By the end of this course, students will know the design process, how to solve problems, how to generate ideas, prototype solutions, and evaluate a design and a design process, and how to communicate that your design solved the problem in the most suitable way.
- By the end of this course students will be able to manage the design process; communicate how they solved a problem; and invent a solution to a problem.
- By the end of this course, students will have experience using digital fabrication tools to design/invent solutions to problems.

**Prerequisites:** Completion of IB Design-Tech SL1 with a grade of B or higher.

**Course Length:** Year

**Meets NBPS Graduation Requirement?** Elective

**Included in Bright Futures GPA calculation?** No

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**NCAA Core Class?** Yes

**State University Core Class?** Elective