

International Baccalaureate Design Technology II

IB4586 36 weeks

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Course Description

Prerequisite: IB4585

Design and Technology is a recognized International Baccalaureate course. This course is designed to promote an understanding and appreciation of the technology design process as a cycle. As students work through the technology course and related project, which unifies all aspects of IB design technology, they analyze and evaluate the impact and ethical considerations arising from technology. The course focuses on how design is used to produce outcomes. The design project is assessed against the design technology criteria: planning, research, development, evaluation, and manipulative skills.

Curriculum Framework

IB course curriculum is available only to IB identified schools through the Online Curriculum Centre (OCC) at the password-protected IB Web site (<http://occ.ibo.org>).

Entrepreneurship Infusion Units

Entrepreneurship Infusion Units may be used to help students achieve additional, focused competencies and enhance the validated tasks/competencies related to identifying and starting a new business venture. Because the unit is a complement to certain designated courses and is not mandatory, all tasks/competencies are marked “optional.”

Appendix: Credentials, Course Sequences, and Career Cluster Information

Industry Credentials: Only apply to 36-week courses

- College and Work Readiness Assessment (CWRA+)
- National Career Readiness Certificate Assessment
- Workplace Readiness Skills for the Commonwealth Examination

Concentration sequences: *A combination of this course and those below, equivalent to two 36-week courses, is a concentration sequence. Students wishing to complete a specialization may take additional courses based on their career pathways. A program completer is a student who has met the requirements for a CTE concentration sequence and all other requirements for high school graduation or an approved alternative education program.*

- International Baccalaureate Design Technology I (IB4585/36 weeks)

| Career Cluster: Science, Technology, Engineering and Mathematics | |
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| Pathway | Occupations |
| Engineering and Technology | Aerospace Engineer Aerospace Engineering Technician Agricultural Engineer Architect Biomedical Engineer Chemical Engineer Civil Engineer Civil Engineering Technician Commercial and Industrial Designer Computer Hardware Engineer Computer Programmer Computer Software Engineer Electrical Engineer Electrical Engineering Technician Electro-Mechanical Technician Electronics Engineering Technician Engineer Engineering Manager Engineering Technician Environmental Engineer |

| Career Cluster: Science, Technology, Engineering and Mathematics | |
|---|---|
| Pathway | Occupations |
| | Human Factors Engineer Industrial Engineer Industrial Engineering Technician Landscape Architect Manufacturing Systems Engineer Marine Engineer Materials Engineer Mechanical Engineer Mechanical Engineering Technician Nuclear Engineer Petroleum Engineer Power Systems Engineer Project Manager Quality Engineer Quality Technician Statistician |
| Science and Mathematics | Environmental Scientist Geoscientist Hydrologist Materials Scientist Oceanographer Research Chemist |