

Associate in Engineering

Specialization in Faith-Based Infrastructure and Community Development

HBI University

Course Duration: 2 years

Credit Hours: 75 hours (including 15 minor credit hours)

Program Description

The Associate in Engineering program with a Specialization in Faith-Based Infrastructure and Community Development equips students with foundational engineering skills and a heart for service. This program integrates technical knowledge with ethical leadership, preparing students to design solutions that improve lives and reflect God's call to stewardship and justice.

Through studies in civil systems, sustainability, and project design, students explore how infrastructure development can strengthen underserved communities. With a focus on faith-based outreach, students are empowered to serve through missions, nonprofits, or continued education in engineering or ministry.

Graduates will be prepared to work as entry-level technicians, site coordinators, or project assistants in engineering or development organizations with a focus on positive social impact.

General Education Courses (15 Credit Hours)

Course Code	Course Name	Credit Hours
GEN 101	English Composition I	3
GEN 102	English Composition II	3
GEN 103	College Algebra	3
GEN 104	Introduction to Psychology	3
GEN 105	Introduction to Sociology	3

Core Engineering Courses (30 Credit Hours)

Course Code	Course Name	Credit Hours
ENG 201	Introduction to Engineering Principles	3

ENG 202	Technical Drawing and CAD Design	3
ENG 203	Engineering Materials and Mechanics	3
ENG 204	Surveying and Site Planning	3
ENG 205	Structural Design Basics	3
ENG 206	Fluid Mechanics and Environmental Systems	3
ENG 207	Energy Systems and Sustainability	3
ENG 208	Project Estimation and Engineering Math	3
ENG 209	Construction Practices and Field Safety	3
ENG 210	Engineering for Humanitarian Projects	3

Elective Courses (15 Credit Hours)

Course Code	Course Name	Credit Hours
ENG 301	Disaster Resilient Design	3
ENG 302	Renewable Energy Systems	3
ENG 303	Public Health Infrastructure	3
ENG 304	Technology and Appropriate Design	3
ENG 305	Global Engineering Ethics and Responsibility	3

Minor in Faith-Based Infrastructure and Community Development (15 Credit Hours)

Course Code	Course Name	Credit Hours
FCD 401	Biblical Foundations for Building and Justice	3

FCD 402	Faith and Technology in Community Development	3
FCD 403	Theology of Land, Place, and Stewardship	3
FCD 404	Ministry Partnerships and Missional Project Planning	3
FCD 405	Sustainability and Service in Christian Outreach	3

Capstone Project (3 Credit Hours)

The Capstone in Faith-Based Infrastructure and Community Development allows students to create a practical project or proposal aligned with a real community need. Projects may include:

- Designing a low-cost, sustainable facility for a mission organization.
- Drafting a clean water or sanitation project proposal for a village.
- Planning a collaborative build initiative with a church or nonprofit.

Program Outcomes

- Apply basic engineering practices in socially responsible ways.
- Collaborate on infrastructure and development projects in underserved communities.
- Integrate faith and technical work to promote justice and dignity.
- Lead or support initiatives that enhance quality of life.
- Advance to further study in engineering, public works, or missions.

Career Outcomes and Potential Pay Scale

Career Path	Average Salary (Annual)
Engineering Assistant (Faith or Nonprofit Sector)	\$45,000 - \$60,000
Community Development Project Coordinator	\$46,000 - \$65,000
Construction and Site Supervisor	\$47,000 - \$63,000
Technical Field Consultant (Missions/NGOs)	\$44,000 - \$58,000

Infrastructure Program Manager	\$50,000 - \$68,000
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