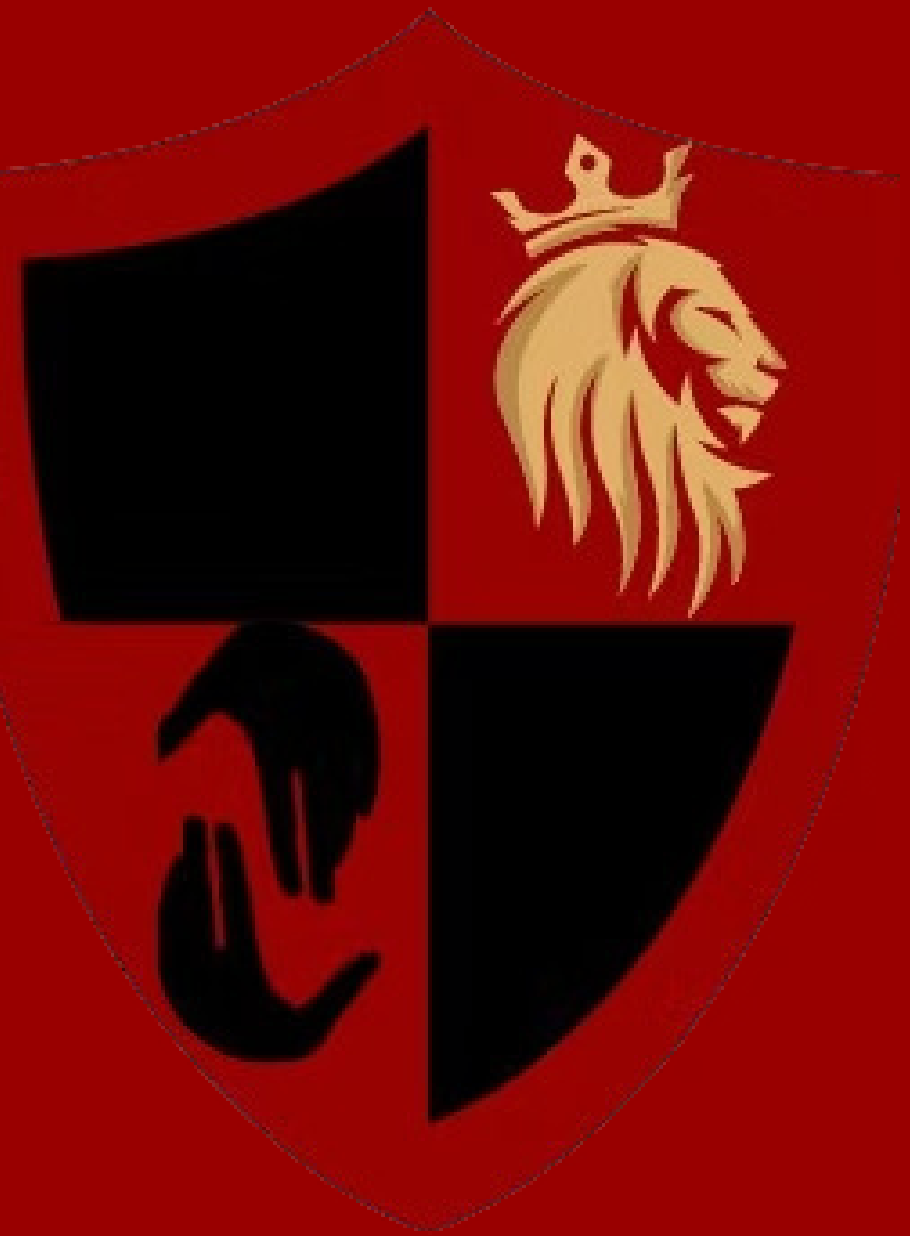

Bachelor of Engineering with a Faith-Based Approach

The B.Eng. program at Ebed-Melech University integrates engineering principles with faith-based perspectives, equipping students with technical skills for engineering excellence while fostering understanding of the ethical and spiritual dimensions of their profession.

Program Overview

120

Credit Hours

Comprehensive curriculum covering engineering fundamentals and faith-based ethics

100%

Online

Fully flexible learning experience accessible from anywhere

4-8

Week Classes

Accelerated format for faster progression through coursework

3-4

Years

Complete your degree at your own pace

Foundation Year: Building Core Competencies

Semester 1

- ENG 101 – English Composition I (3 credits)
- MAT 101 – Calculus I (3 credits)
- PHY 101 – Physics I (3 credits)
- REL 101 – Introduction to World Religions (3 credits)
- Elective Course (3 credits)

Semester 2

- ENG 102 – English Composition II (3 credits)
- MAT 102 – Calculus II (3 credits)
- PHY 102 – Physics II (3 credits)
- CHE 102 – Introduction to Chemical Engineering (3 credits)
- Elective Course (3 credits)

The first year establishes a strong foundation in mathematics, physics, and communication skills while introducing students to religious perspectives that will inform their engineering practice.

Sophomore Year: Advanced Fundamentals

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Semester 3

- CSC 201 – Introduction to Computer Science
- MAT 201 – Calculus III
- PHY 203 – Modern Physics
- CHE 203 – Chemical Processes
- Elective Course

Semester 4

- ENG 201 – Technical Writing and Communication
- MAT 202 – Differential Equations
- PHY 220 – Thermodynamics
- EGR 250 – Introduction to Faith-Based Engineering Ethics
- Elective Course

Year two deepens technical knowledge while introducing the critical intersection of faith and engineering ethics, preparing students to approach their profession with moral clarity.

Junior Year: Specialized Engineering Studies

Semester 5

1. EGR 301 – Engineering Materials (3 credits)
2. EGR 302 – Statics and Dynamics (3 credits)
3. EGR 305 – Faith-Inspired Innovation in Engineering (3 credits)
4. EGR 306 – Engineering Project Management (3 credits)
5. Elective Courses (3 credits)

Semester 6

1. EGR 303 – Fluid Mechanics (3 credits)
2. EGR 304 – Engineering Ethics and Social Responsibility (3 credits)
3. EGR 401 – Engineering and Environmental Stewardship (3 credits)
4. Elective Courses (6 credits)

The junior year focuses on core engineering disciplines while emphasizing faith-inspired innovation, environmental stewardship, and social responsibility in engineering practice.

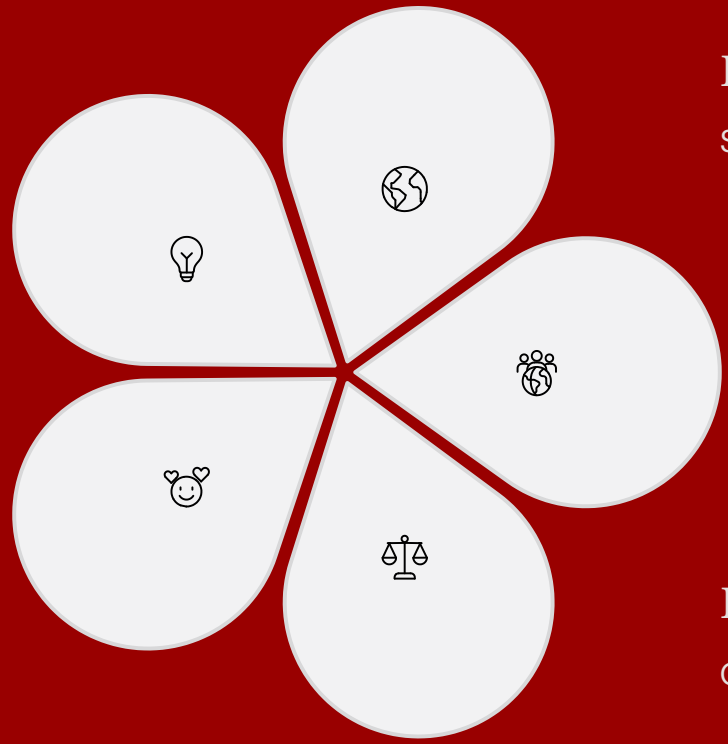
Faith-Inspired Innovation

Creative Problem-Solving

Applying faith principles to engineering challenges

Purpose-Driven Work

Finding meaning in technical excellence



Environmental Stewardship

Sustainable design with spiritual responsibility

Social Responsibility

Engineering solutions that serve humanity

Ethical Leadership

Guiding teams with moral clarity

Our unique approach integrates faith perspectives throughout the engineering curriculum, preparing graduates to lead with both technical expertise and moral conviction.

Senior Year: Leadership and Application

1 Semester 7

EGR 407 – Advanced Topics in Faith-Based Engineering (3 credits)

EGR 408 – Engineering Design and Innovation (3 credits)

EGR 409 – Engineering Ethics in Global Contexts (3 credits)

Elective Courses (6 credits)

2 Semester 8

EGR 411 – Engineering Leadership and Professionalism (3 credits)

EGR 412 – Engineering and Society (3 credits)

Elective Courses (3 credits)

CAP 469 – Capstone Project (6 credits)

The final year emphasizes leadership, global perspectives, and culminates in a comprehensive capstone project that demonstrates mastery of both technical and faith-based engineering principles.

Capstone Project: Bringing It All Together

Research & Planning

Identify real-world engineering challenges that align with faith-based values

Design & Development

Create innovative solutions using technical expertise and ethical frameworks

Implementation & Presentation

Demonstrate professional competency and faith-inspired leadership

The 6-credit capstone project represents the culmination of your engineering education, requiring you to synthesize technical knowledge, ethical reasoning, and faith-based perspectives into a comprehensive engineering solution.

Your Purpose-Driven Engineering Career

At Ebed-Melech University, we believe that engineering is more than a profession—it's a calling. Our graduates emerge as technically proficient engineers who understand their work as service to humanity and stewardship of creation.

You'll be prepared to lead in diverse engineering fields while maintaining strong ethical foundations and a clear sense of purpose. Whether you pursue careers in civil, mechanical, electrical, or environmental engineering, you'll bring a unique perspective that combines excellence with integrity.

The integration of faith and engineering throughout our curriculum ensures you're ready to tackle the complex challenges of modern engineering while staying grounded in timeless values.

For Such a Time as This

> "And who knows but that you have come to your royal position for such a time as this?"
>
> **Esther 4:14**

Your engineering education at Ebed-Melech University prepares you to make a meaningful impact in the world. With 120 credit hours of comprehensive training, fully online flexibility, and a unique faith-based approach, you're equipped to become the engineer the world needs.