

## Associate in Astronomy

### Specialization in Faith-Based Space Education and Public Outreach

HBI University

Course Duration: 2 years

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

#### Program Description

The Associate in Astronomy program with a Specialization in Faith-Based Space Education and Public Outreach offers students a unique opportunity to explore the universe through scientific discovery and spiritual wonder. This program integrates the study of astronomy with faith-centered communication, allowing students to inspire curiosity and share the marvels of creation in community, church, and educational settings.

Students will study celestial phenomena, planetary science, and the history of space exploration while developing public speaking, teaching, and ministry skills for outreach programs, observatory events, and STEM ministries.

Graduates may pursue roles in science education, museum programming, public astronomy outreach, or continue toward a bachelor's degree in astronomy, science communication, or education.

#### 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 Astronomy Courses (30 Credit Hours)

| Course Code | Course Name                        | Credit Hours |
|-------------|------------------------------------|--------------|
| AST 201     | Introduction to Astronomy          | 3            |
| AST 202     | Solar System and Planetary Science | 3            |

|         |                                          |   |
|---------|------------------------------------------|---|
| AST 203 | Stars, Galaxies, and Cosmology           | 3 |
| AST 204 | Observational Astronomy and Telescopes   | 3 |
| AST 205 | Physics of Space and Astrobiology        | 3 |
| AST 206 | History of Astronomy and Space Discovery | 3 |
| AST 207 | Astronomy Lab and Data Analysis          | 3 |
| AST 208 | Christian Perspectives on the Cosmos     | 3 |
| AST 209 | Science Education and Public Engagement  | 3 |
| AST 210 | Astronomy Capstone Project               | 3 |

### **Elective Courses (15 Credit Hours)**

| Course Code | Course Name                                     | Credit Hours |
|-------------|-------------------------------------------------|--------------|
| AST 301     | Planetarium Presentation and Program Design     | 3            |
| AST 302     | Faith-Based STEM Curriculum Development         | 3            |
| AST 303     | Astronomy in Christian Art and Literature       | 3            |
| AST 304     | Space Ethics and Exploration Policy             | 3            |
| AST 305     | Public Speaking for Science and Faith Audiences | 3            |

### **Minor in Faith-Based Space Education and Public Outreach (15 Credit Hours)**

| Course Code | Course Name | Credit Hours |
|-------------|-------------|--------------|
|-------------|-------------|--------------|

|         |                                                       |   |
|---------|-------------------------------------------------------|---|
| FSE 401 | Theology of Creation and the Heavens                  | 3 |
| FSE 402 | Designing Astronomy Programs for Youth Ministries     | 3 |
| FSE 403 | Astronomy and Apologetics: Bridging Faith and Science | 3 |
| FSE 404 | Outreach Planning for Church and Community Events     | 3 |
| FSE 405 | Astronomy Missions and Evangelism Through Science     | 3 |

### Capstone Project (3 Credit Hours)

The Capstone in Faith-Based Space Education and Public Outreach invites students to create a project that connects astronomical science with spiritual education. Sample projects include:

- Planning a church-hosted stargazing event and education night.
- Creating a youth curriculum that integrates space science and Scripture.
- Developing a multimedia presentation for Christian science festivals or planetariums.

### Program Outcomes

Graduates of this program will:

- Understand fundamental astronomy principles and practices.
- Inspire others through science education and faith-based outreach.
- Communicate complex concepts in accessible and engaging ways.
- Integrate biblical worldview with scientific discovery.
- Serve as advocates for wonder, learning, and stewardship of creation.

### Career Outcomes and Potential Pay Scale

|             |                         |
|-------------|-------------------------|
| Career Path | Average Salary (Annual) |
|-------------|-------------------------|

|                                                  |                     |
|--------------------------------------------------|---------------------|
| Astronomy Outreach Coordinator                   | \$45,000 - \$60,000 |
| Planetarium Program Assistant                    | \$42,000 - \$58,000 |
| STEM Ministry Leader                             | \$44,000 - \$61,000 |
| Science Communicator (Faith-Based Organizations) | \$46,000 - \$64,000 |
| Education Specialist (Museum or Observatory)     | \$47,000 - \$63,000 |