

Outline

1. Institute Background
2. Core Programs
3. Engineering Science
Program
4. Credit Requirements

Institute Background

1. Established in 2008
2. BTech, MTech and PhD programs in major engineering & science streams
3. Focus on Invention and Innovation in Teaching and Research
4. IIT Hyderabad ranked **#7** in India in 2016¹

¹*National Institutional Ranking Framework*

Core Programs

- ▶ **Engineering:** Chemical, Civil, Computer Science, Electrical, Mechanical and Aerospace, Material Science
- ▶ **Science:** Chemistry, Mathematics, Physics

ES Program Objectives

- ▶ Interdisciplinary engineering program
- ▶ Emphasis on understanding and integrated application of engineering, science and math principles
- ▶ ‘T’ structured education
 - ▶ First 2 years: broad exposure to core engineering and science streams
 - ▶ Next 2 years: specialize in core engineering streams OR in engineering science

ES Program Expected Outcomes

- ▶ Ability to apply acquired math, science and engineering skills to solve real-world engineering problems
- ▶ Ability to identify, formulate and solve multi-disciplinary engineering problems
- ▶ Ability to work well in inter-disciplinary teams with focus on system integration

ES Program: First 2 Years

- ▶ Courses from all core engineering and science disciplines
- ▶ Provides breadth education
- ▶ Enough time and exposure to make informed decision on core specialization

ES Program: Core Choice

- ▶ No more than 25% of the incoming class can move to a given core engineering discipline
- ▶ *Core engineering discipline allotted based on CGPA and student choice*

ES Program: Final 2 Years (Specialization)

- Covers core engineering subjects
- Provides depth education
- Material covers GATE syllabus³

³core material

ES Program: Final 2 Years

(without specialization)

- Flexible program –
breadth/depth
- Opportunity for interdisciplinary
skill development

ES Program: Final 2 Years

(without specialization)

Core Engg Electives	34 (across two years) <ul style="list-style-type: none">-- Min. of 6 credits from 4 departments-- 10 remaining credits from any department-- 9 credits from advanced (4th year) courses 12
Free/Science Electives	(across two years) = 3/semester
LA/CA Electives	8 (across two years) = 2/semester
Project	12 (across two years) = 3/semester