VFSTR • EXECUTIVE COUNCIL • 30th MAY 2026

# Assessment Pattern & Changes

*New Courses & Programmes*

PRESENTED BY

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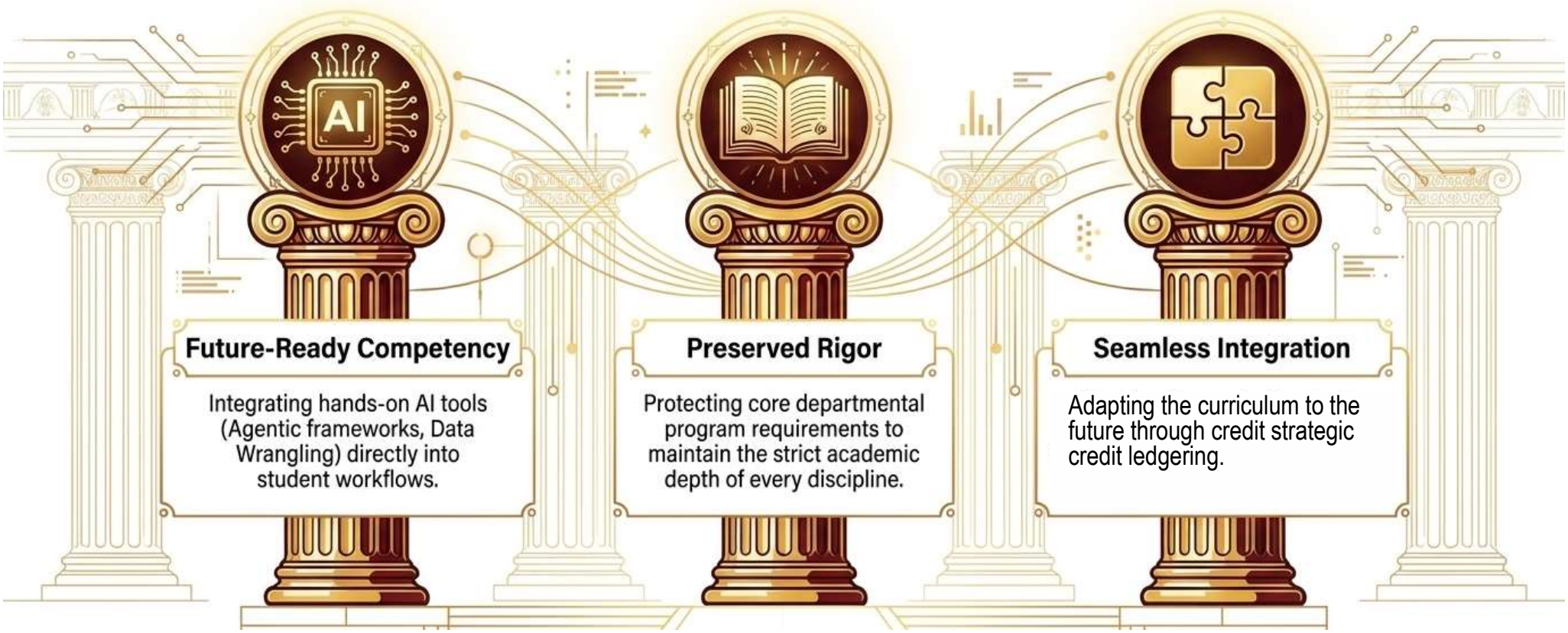
Professor • Dean – Academics, Assessment & Awards, VFSTR

# Curriculum & Assessment Revision

VIGNAN'S
FOUNDATION FOR SCIENCE, TECHNOLOGY & RESEARCH
(Deemed to be University) - Estd. u/s 3 of UGC Act 1956

## Curriculum Revision (C26) – A Balanced Academic Ecosystem



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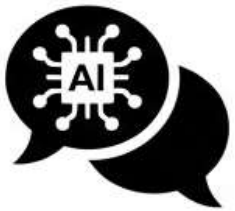
## Curriculum Revision (C26) – Concurrent Foundational Enhancement

### Orientation Program: 1 → 2 Credits

Expanded to a 60-Hour total duration. Explicitly dedicated to strengthening the Foundations of Mathematics and English prior to core coursework.




### Technical English Communication (TEC): +1 Credit Reassigned

Curriculum explicitly modernized to include applied Prompt Engineering concepts, bridging traditional English communication with human-AI interaction.

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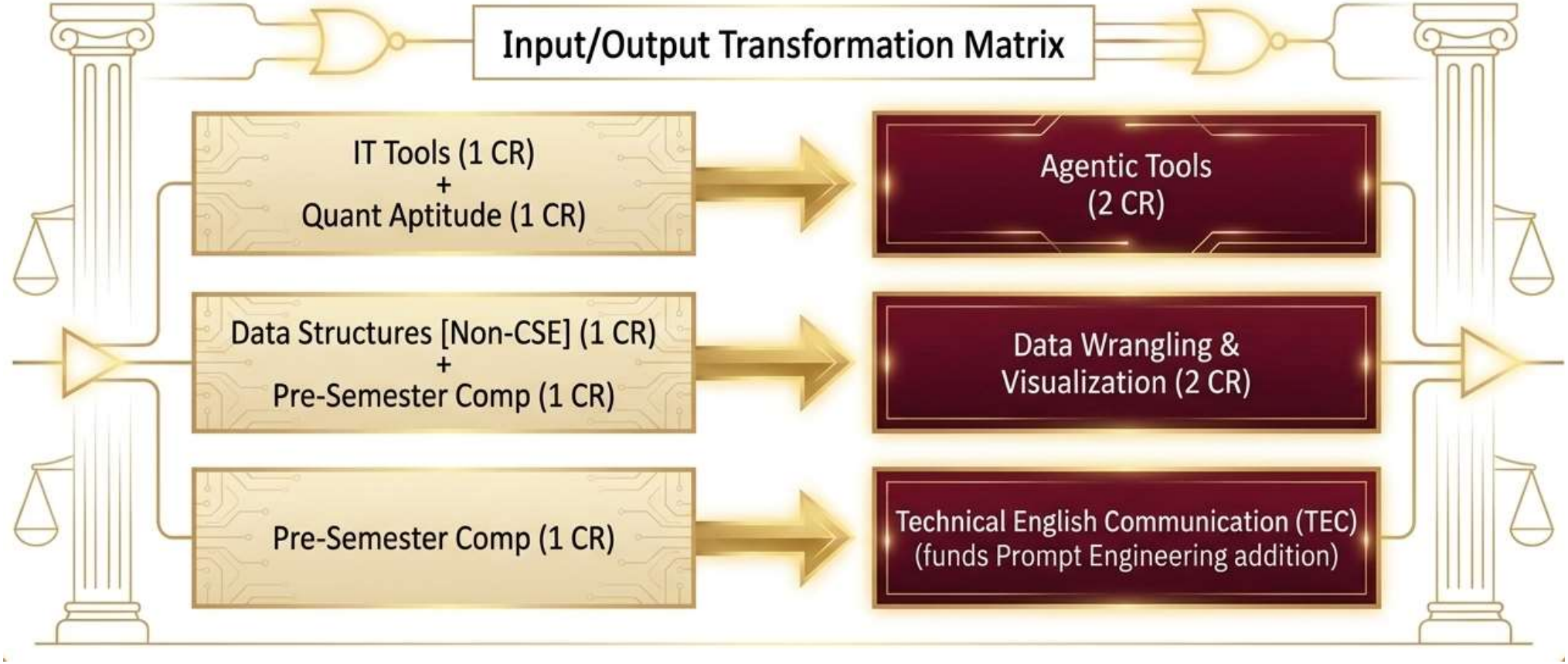
## Curriculum Revision (C26) – Credit Shift Diagnostic Table



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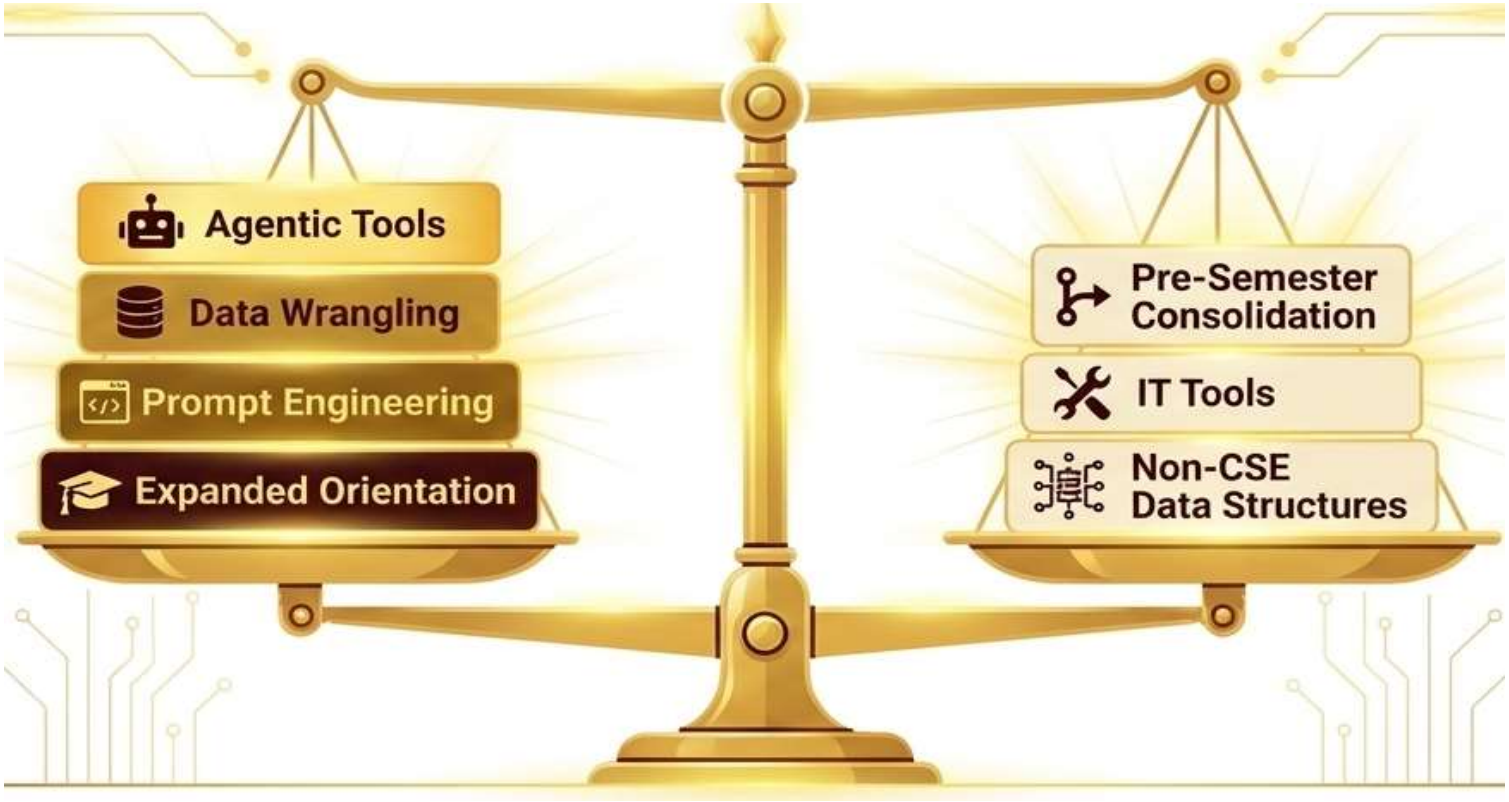
## Curriculum Revision (C26)

**AI Integration + Expanded Orientation**



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## Curriculum Revision (C26) – AI & Skill Course Roster

The C26 Curriculum introduces a targeted suite of modular and core competencies, shifting the focus from basic computer literacy to advanced human-AI interaction and machine learning.

| | | | | |
|---|---|---|---|---|
|  | **Agentic Tools** | 2 Credits | New Introduction | Modular Customization |
|  | **Data Wrangling & Visualization** | 2 Credits | New Introduction | Modular Customization |
|  | **Machine Learning** | 3 Credits | New Introduction | Open Elective |
|  | **Python Programming Essentials** | 3 Credits | Existing Course | Foundational Core |

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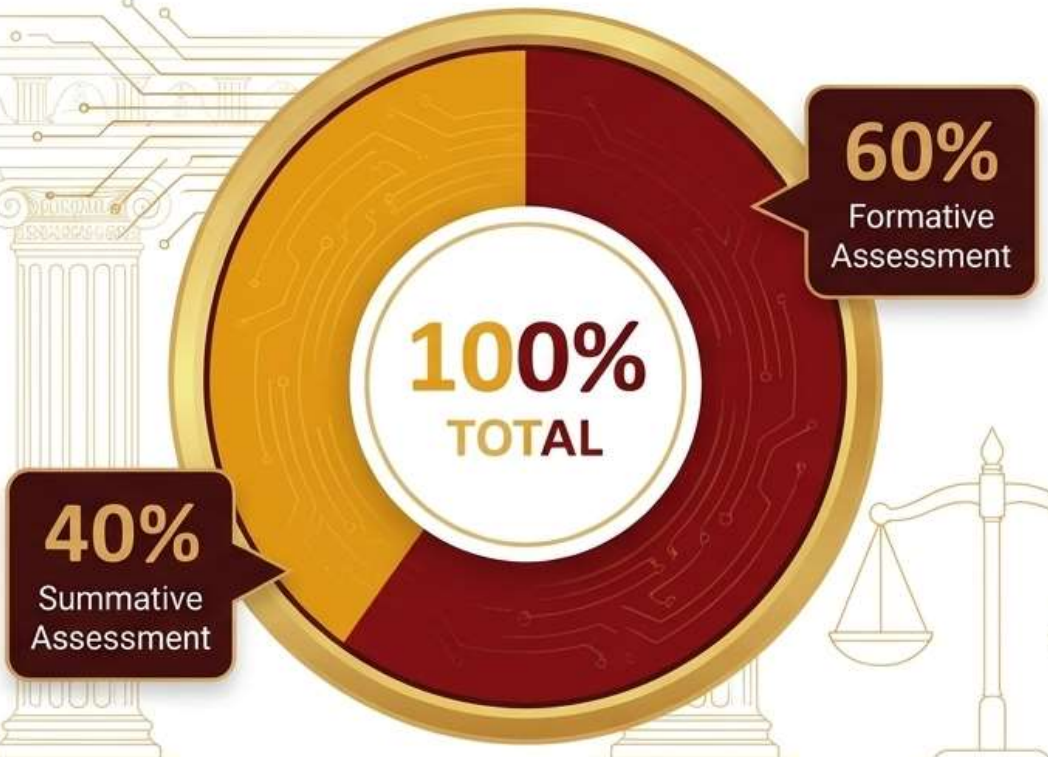
## Assessment Revision




### Continuous Engagement

The 60/40 allocation mandates a more continuous, module-by-module evaluation process. All four Formative Assessments remain strict, paper-based, and heavily proctored.

### Question Bank Policy

To ensure genuine comprehension, module question banks will strictly not be distributed to students.

# Curriculum & Assessment Revision

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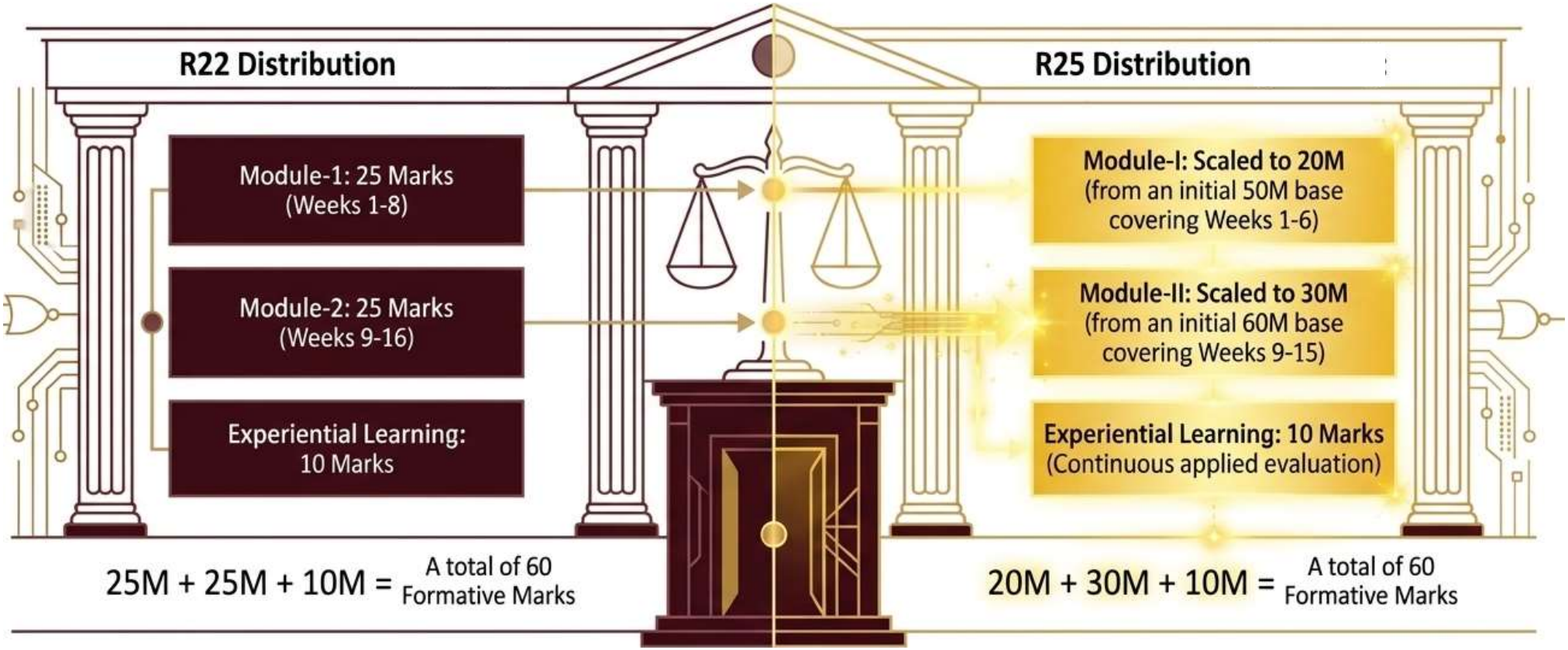
## Formative Assessment Distribution



PART I

# Curriculum & Assessment Revision

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## Formative Assessment in a Nut Shell

### 1 FORMATIVE ASSESSMENT (FA)

**Proctored, paper-based** assessment to evaluate learning periodically.


**30 MINUTES** (10 MARKS)
**2 QUESTIONS × 5 MARKS**
MAXIMUM OF TWO SUBDIVISIONS PER QUESTION

**60 MINUTES** (20 MARKS)
**4 QUESTIONS × 5 MARKS**
MAXIMUM OF TWO SUBDIVISIONS PER QUESTION

**KEY RULES**

- All FAs are **proctored & paper-based**
- 30-min FA can be conducted for **2–3 courses in a day**
- Internal choice **is not allowed** in FAs.

### 2 CONTINUOUS LEARNING ASSESSMENT (CLA)

Continuous evaluation through practical, theoretical and experiential learning activities.

**CLA-1 TO CLA-4 (10 MARKS EACH)**

FOR PRACTICAL (P)
2 LAB EXPERIMENTS (5M EACH)

FOR THEORY (L/T)
ASSIGNMENT / CLASS ASSESSMENT

**CLA-5 (EXPERIENTIAL LEARNING – 8 MARKS)**

FOR PRACTICAL (P)
INTERNAL LAB ASSESSMENT (AT LEAST 6 EXP.) OR MINI PROJECT

FOR THEORY (L/T)
SEMINAR | MINI PROJECT | CASE STUDY | REAL-TIME EXAMPLES

**MCQs / SDGs ACTIVITY**
(It should be relevant to the course content/outcomes (with documentation) of the respective courses.)

**ATTENDANCE (2 MARKS)**
90–100% : 2 MARKS
80–90% : 1 MARK

### 3 SPECIAL RULE

For binary graded / only P-based / Minors / Honours courses, **only CLA-based assessment is applicable.**

BINARY GRADED | ONLY P-BASED | MINORS | HONOURS

# Curriculum & Assessment Revision

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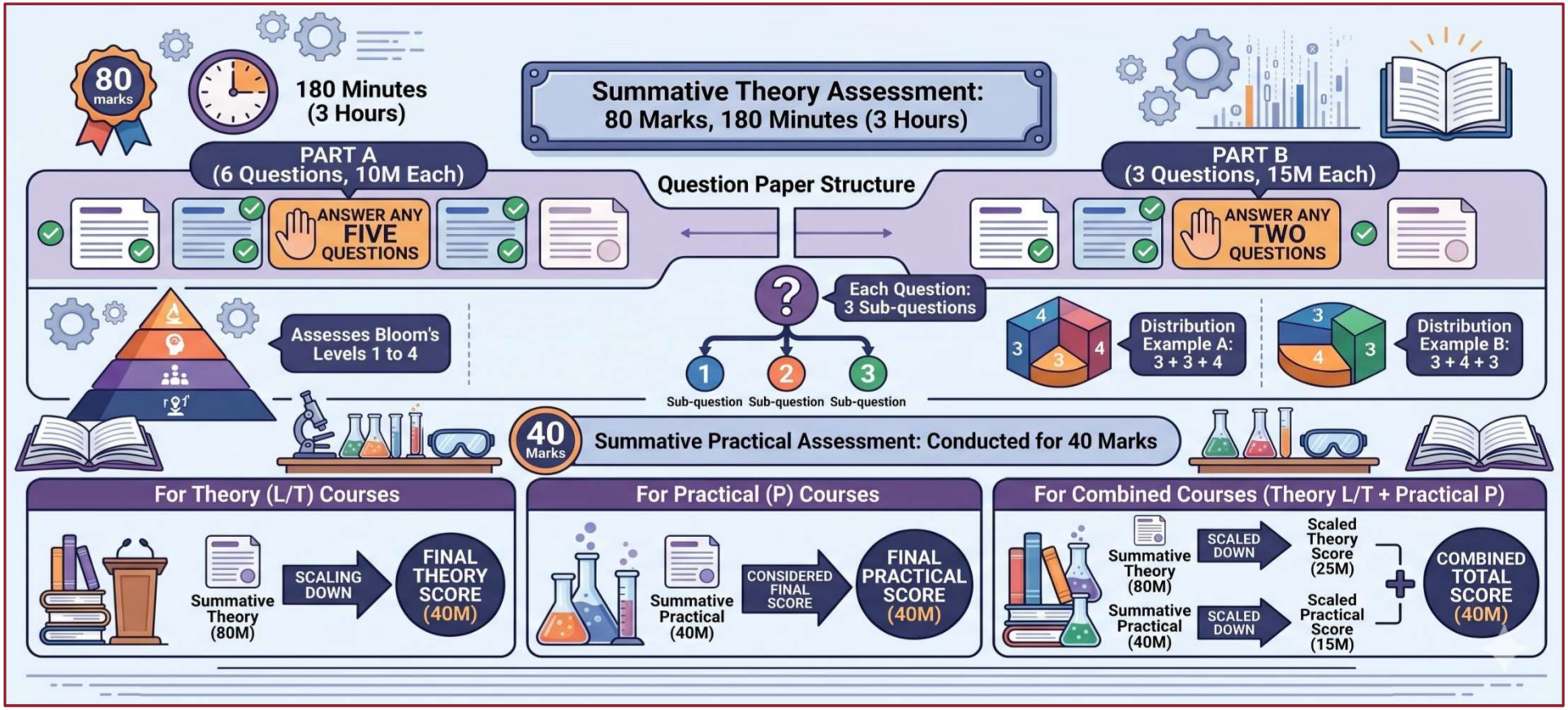
## Summative Assessment in a Nut Shell



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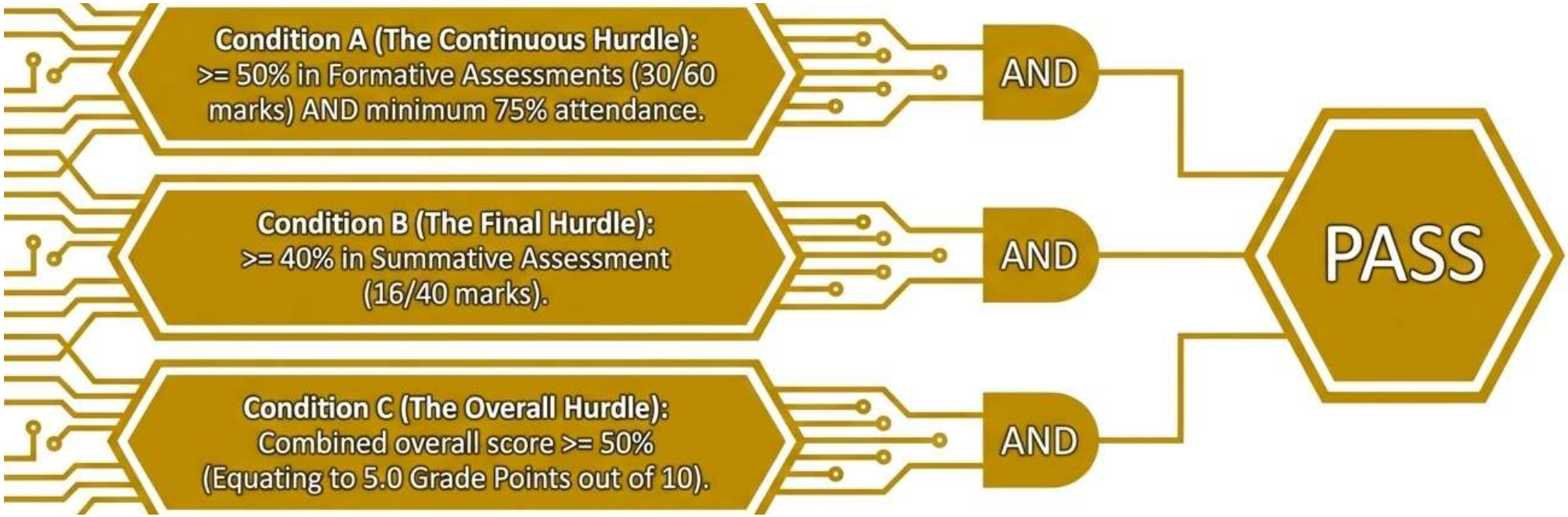
## Conditions to clear a course

Three simultaneous conditions must be met to clear a course



# THANK YOU

TOWARDS BUILDING AN WORLD-CLASS INSTITUION

# Curriculum Restructuring

VIGNAN'S
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## B.Sc. Mathematics, Statistics and Computer Science

## B. Sc. Actuarial Science

# Curriculum Restructuring

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## Existing Programs

### B.Sc. Mathematics, Statistics and Computer Science

- The Department of Mathematics & Statistics is offering B.Sc. (Mathematics, Statistics , Computer Science) program from 2017 onwards.
- During R22 major revision, in line with NEP 2020, the program is restructured as B.Sc. with onward continuation to M.Sc. Data Science.

**In order to meet the UGC guidelines, in line with NEP 2020, we want to restructure the existing B.Sc. triple major (Mathematics, Statistics and Computer Science) to B.Sc. (Honors) Statistics with Computer Science minor.**

### B. Sc. Actuarial Science

- The Department of Mathematics & Statistics has approval to offer B.Sc. Actuarial Science program from 2024 onwards as a 3-year degree program.

**As per UGC guidelines for undergraduate degrees, we want to extend the same to a 4-years B.Sc. Honors degree program.**

# Curriculum Restructuring

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## Proposed Extension

### B.Sc. Statistics with Computer Science minor

- Program is of 4 years (8 Semesters) duration with a total of 160 credits, completing this student will be awarded a "B.Sc. (Honors)" degree.
- A student can choose for an optional exit after completion of 3years (6 Semesters), earning 126 credits. For such students a " B.Sc." degree will be awarded.
- The proposal was discussed in BoS conducted on 27.01.2026 and approved by the BoS members.

### B. Sc. (Honors) Actuarial Science

- Program is of **4 years (8 Semesters)** duration with a total of **160 c**redits, completing this student will be awarded a "B.Sc. (Honors)" degree.
- A student can choose for an optional exit after completion of **3 years (6 Semesters)**, earning **126** credits. For such students a " B.Sc." degree will be awarded.
- The proposal was discussed in BoS conducted on 27.01.2026 and approved by the BoS members.

# Curriculum Restructuring

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## Credit Distribution (same for both Programs)

**B.Sc. (Honors) Statistics with Computer Science minor**

**B. Sc. (Honors) Actuarial Science**

| Subject Name | Existing (R22) | Proposed (R25-C26) |
|---|---|---|
| Mathematics | 19% | 13% |
| Statistics | 18% | 28% |
| Computer Science | 29% | 20% |
| Electives | 18% | 9% |
| AI | NA | 8% |
| Others | 16% | 22% |
| Credits | 120 | 160 |

## Expected Outcome

- Industry-ready graduates with analytical and computational skills
- Enhanced employability
- Alignment with AI-enabled and technology-driven ecosystem

# Introduction of New PhD Programmes

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## Proposal for introducing PhD in Biomedical Engineering

# Introduction of New PhD Programmes

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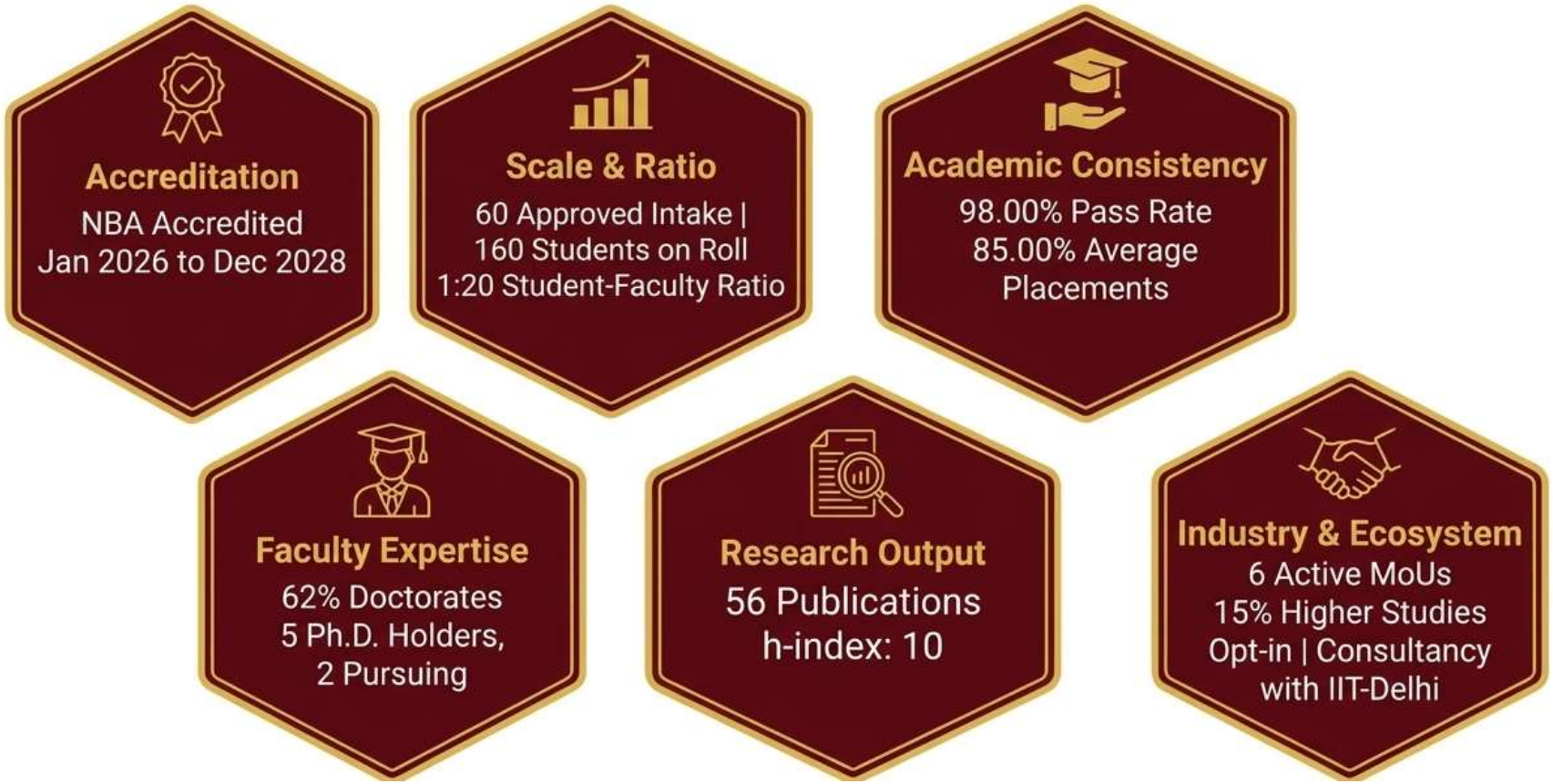
## BME Department : Current Status & Highlights



# Introduction of New PhD Programmes

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## Faculty Research & Pedigree

### Dr. Amit Kumar Singh

**Officiating Associate Professor**

**Pedigree:** Ph.D., IIT Delhi

**Research Areas:** Biosensors, biomedical diagnostic devices, embedded systems, virtual instrumentation.

### Dr. A. Sateesh Reddy

**Assistant Professor**

**Pedigree:** Ph.D., North-Eastern Hill University, Shillong

**Research Areas:** engineering, autonomous navigation systems, biomedical signal processing.

### Dr. G. Prasanna

**Assistant Professor & Incharge HoD**

**Pedigree:** Ph.D., Homi Bhabha National Institute (DAE), Mumbai

**Research Areas:** Radiation detection/measurement for medical apps, IoT in medicine, wearable devices.

# Introduction of New PhD Programmes

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## Research Infrastructure & Proposed Intake

### State-of-the-Art Equipment Available

| Category | Content |
|---|---|
| Category 1: Diagnostic & Monitoring | Neuromax 32ch (Digital EEG), ECG (12 lead), Multiparameter monitor, Ophthalmoscope, Digital storage oscilloscope, PFT Machine. |
| Category 2: Therapeutic | Shortwave/Longwave/Ultrasonic diathermy, Defibrillator, Syringe/Infusion Pump. |
| Category 3: Analytical & Software | COMSOL Multiphysics, MATLAB, Spectrophotometer, Digital pH meter, Sensor lab trainer kits. |

### The Proposal

**Proposed Intake:** 2 Students per year, per supervisor.

**Total Capacity:** 6 students over a 3-year span (minimum Ph.D. duration).

**Alignment:** Complies with UGC Norms for Assistant Professors (max 4), Associate (max 6), and Professors (max 8).

**Status:** Approved by BoS & Academic Council. Awaiting Executive Council final approval.

# THANK YOU

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