

# 4 year BS programme through Design your own degree (DYOD) mode

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# Why Design your own degree?

#### Customization

- Students design their academic journeys based on their interests, aptitudes, and career aspirations
- Break traditional boundaries between subjects
- ullet blend arts, sciences, commerce o well-rounded education, multidisciplinary education.
- **Pedagogy** → Project based collaborative problem solving
  - Active learning → students work on real-world problems to acquire knowledge and skills.
  - Promote → critical thinking, analytical skills, deeper understanding of subjects by placing students in practical situations.
  - ullet Projects o interdisciplinary learning, collaboration, creativity, communication skills
  - Peer learning, understand diverse perspectives, develop team skills.

# Why Design your own degree?

- Increased emphasis on internships, projects, and fieldwork
- Interdisciplinary and transdisciplinary learning
- ullet Skill development ullet essential for the future workplace ullet critical thinking, digital literacy, leadership
- Flexible/Innovative evaluation mechanisms
- Integration of Technology  $\rightarrow$  better learning experiences using online resources, digital collaboration tools, simulation software
- ullet Flexibility in duration and exit options ullet educational journey is tuned to individual student needs.
- Many similarities between NEP2020 and DYOD

#### Academic Scheme

#### **Academic Scheme**

- The BS program through DYOD is a four year UG program to be coordinated by Design Innovation Centre (DIC@IUST).
- Nomenclature:  $\rightarrow$  BS<sup>1</sup> in a Major discipline  $\rightarrow$  through DYOD mode.
- Duration: 4 years (8 semesters) for BS (Hons / Research) in Regular mode.
- Students would *Major* in a specific domain (seven subject areas have been identified as of now)
- More than 50% of total credits need to be earned in the Major discipline to qualify for BS in the Major discipline.
- Semester break-up

Semester	Courses	Department
1,2,3	All domains	DIC
4	Bridge Semester	Majoring department
5,6,7,8	Major	Majoring department

<sup>&</sup>lt;sup>1</sup>The nomenclature is proposed on the recommendations of the Expert Committee to Review the Notification on the Specification of Degrees and Suggest New Degree Nomenclature(s) formed by UGC 6/20

## Academic Scheme - Course Baskets

Five baskets identified in Major disciplines:

S.no	Theme	Acronym	Course Basket	Basket code
1.	Physical, Biological Sciences	PBS	Basket 1	S
2.	Mathematical skills	MS	Dasket 1	
3.	Humanities, Social Sciences	HSS	Basket 2	Н
4.	Business management	BM	Dasket 2	
5.	Artificial Intelligence, Data Science	AID	Basket 3	С
6.	Digital Literacy	DL	Dasket 3	
7.	Environment, Sustainable Development	ES	Basket 4	D
8.	Creativity, Innovation, Design	CID	Dasket 4	
9.	Personal Development	PD	Basket 5	W
10.	Health, Wellness, Nutrition	HWN	Dasket 3	

#### **Academic Scheme** - Year 1 and 2

#### Semester details

- **Semesters 1**  $\rightarrow$  Foundational semester  $\rightarrow$  All students enrol in one course from each basket  $\rightarrow$  No choice given
- Semester 2 → Multiple courses floated in each basket, students opt for one course from each basket → Choice given
- Semester 3 → Flexibility to choose all the subjects from any one of the baskets → first step towards declaring Major.
- Declare Major after Semester 3
- **Semester 4**  $\rightarrow$  Bridge semester  $\rightarrow$  Cover-up deficiencies identified by Majoring department

# **Academic Scheme** - Additional points

- Semester long project to be done in all semesters in coordination with mentoring faculty associated with DYOD.
- Semester-long project in the last four semesters would be aligned to the Major subject area.
- Primary Pedagogy → collaborative project based problem solving.

## **Academic Scheme** - Courses

S.no	Course name	Theme	Course Basket
1.	Physics as Fun: Unveiling the Magic	PBS	
2.	Molecules of Life	PBS	
3.	Basic chemistry and Chemistry in Everyday Life	PBS	Basket 1
4.	The Joy of Maths: From zero to infinity	MS	
5.	Maths and Art	MS	
6.	Inclusive Learning With Liberal Arts	HSS	
7.	Lessons from History	HSS	
8.	Poetry, Prose and Drama - An Introductory journey	HSS	Basket 2
9.	Manager's everyday toolbox	BM	
10.	Entrepreneurship and Innovation	ВМ	

## **Academic Scheme** - Courses

S.no	Course name	Theme	Course Basket
11.	Artificial Intelligence for All	AID	
12.	Al Unveiled: Python powered intelligence	AID	
13.	Data-The modern day currency	DL	Basket 3
14.	Social Media and Education	DL	
15.	Computation for solving real world problems	DL	
16.	Introduction to Environmental Sustainability	ES	
17.	Introduction to Climate Change and Resilience	OES	
18.	Design Thinking	CID	Basket 4
19.	Art and Aesthetics	CID	
20.	Theory of Change	CID	

## **Academic Scheme** - Courses

S.no	Course name	Theme	Course Basket
21.	The Art of Effective Communication	PD	
22.	Fun To Know Food	HWN	
23.	Life Support Heroes	HWN	Basket 5
24.	Eat Smart, Live Well: Your Path to Wellness	HWN	Dasket 5
25.	Disaster proofing your world	HWN	

## Academic Scheme-Semester-I

Course code	Course	L-T-P-S	Credits
DIC101S	Joy of Mathematics: From zero to infinity	2-0-1-0	3
DIC101H	Inclusive Learning With Liberal Arts	2-0-0-1	3
DIC101C	AI for all	1-0-1-1	3
DIC101D	Design Thinking	1-0-0-2	3
DIC101W	Art of effective communication	1-1-0-1	3
DIC101E	Project I		4
DIC102E	Study Tour		2
			21

#### Academic Scheme-Semester-II

Course code	Course	Credits
DIC10*S	Course from basket-1	3
DIC10*H	Course from basket-2	3
DIC10*C	Course from basket-3	3
DIC10*D	Course from basket-4	3
DIC10*W	Course from basket-5	3
DIC103E	Project II	4
DIC104E	Seminar	2
		21

#### Course codes

• Department Code: DIC, First year Code: 1\*\*

• Subject Code: 1,2....n, Basket Code: S,H,C,D,W,E

# Majors

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#### Integration with existing FYUGP BS (Hons/Research) courses:

- ullet English o Department of English Language and Literature
- ullet Islamic Studies o Department of Islamic Studies
- ullet Mathematical Sciences o Department of Mathematical Sciences

#### New courses, BS (Hons/Research) in:

- $\bullet$  Media Studies  $\to$  Department of Journalism and Media Studies
- Data Science → Department of Mathematical Sciences
- ullet Artificial Intelligence o Centre of Artificial Intelligence
- Economics → Department of Economics

The list of new programmes will be expanded if similar new programmes are introduced at IUST.

#### **Evaluation Scheme**

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#### Flexibility and Novelty in evaluation

- Continuous Internal Assessment (CIA) based on assignments throughout the semester, e.g., Literature review, group discussions and presentations  $\rightarrow$  50% marks.
- End semester evaluation in the form of open book exams, 24/48-hour long problem solving, group projects or syllabus oriented Q&A based exam  $\to$  50% marks.

## Early exit

# Early exit and future admissions

#### Early exit

- 3 years (6 semesters) BS
- 2 years (4 semesters) Diploma
- 1 year (2 semesters) Certificate Course

**Nomenclature and credits for early exit** Early exit option prescribed under NEP-2020 will be implemented.