KESHAV MAHAVIDYALAYA
(University of Delhi)

AWARENESS SESSION

4TH YEAR UG UNDER NEP:
RESEARCH, ACADEMIC PROJECTS & ENTREPRENEURSHIP

R&D Cell in Association with AAC & IQAC

Single Core Discipline Programs (Honours Courses)

1. B. Com. (Hons)
2. B. A. Hons. (Psychology)
3. B.M.S.
4. B.Sc. (Hons) Physics
5. B.Sc.(Hons) Computer Science
6. B.Sc.(Hons) Mathematics
7. B.Sc.(Hons) Electronics

Three Core Discipline Programs (B. Sc. Program)

1. B.Sc. (Prog.) Physical Sciences with Computer Science
2. B.Sc. (Prog.) Mathematical Sciences

https://centenary.du.ac.in//userfiles/downloads/02032022_UGCF_compressed.pdf

UGCF 2022 Framework
4th Year Flowchart

https://www.du.ac.in/uploads/UGCF-Flowchart.pdf

Structure of UG Single Core Discipline Programs (Hons.)

In a single core discipline program, the student shall Major in the core discipline. However, if he/she wishes to Minor in another discipline then he/she has to earn 28 credits from GE courses of the second discipline.

In four years, a student will study the following number of DSCs, DSEs and GEs:
Total DSC papers : 20
Total DSE paper options : 10 (minimum to be chosen is 4)
Total GE paper options : 10 (minimum to be chosen is 4)

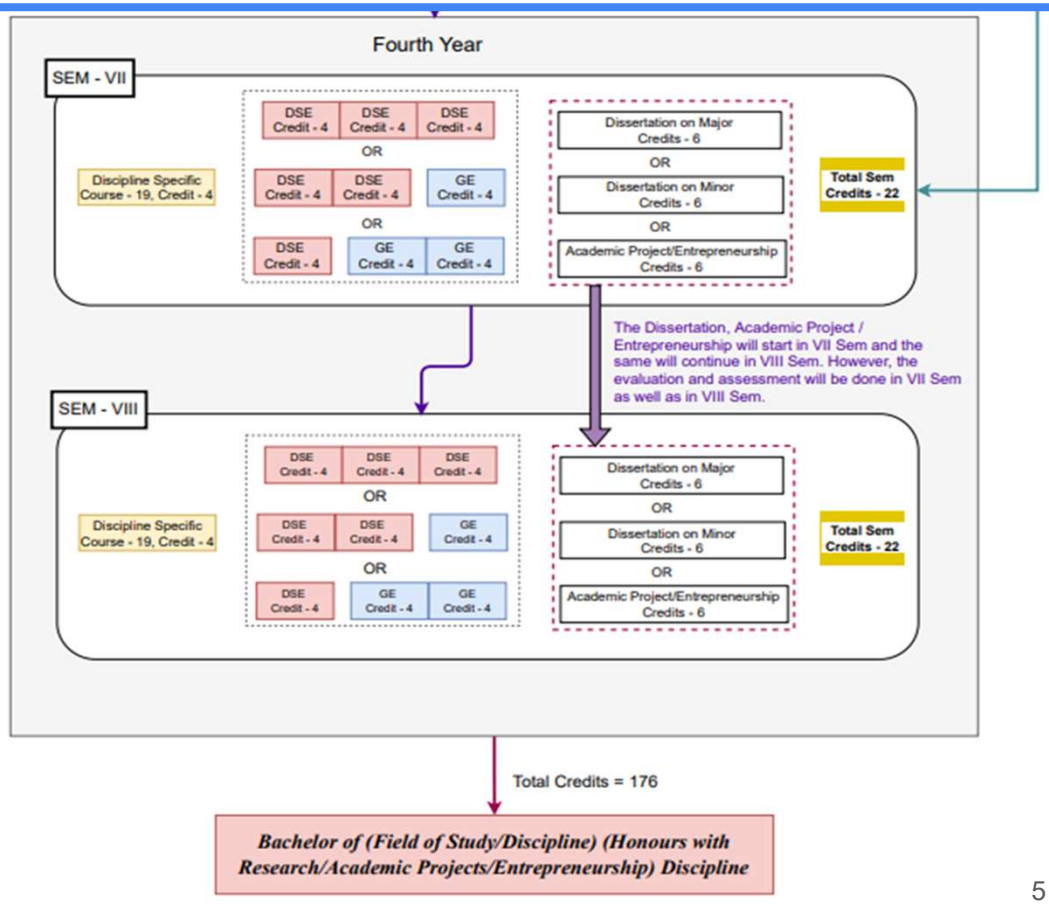
The student can **Minor** in another discipline, if he/she fulfills the following criteria:

Seven GEs = Minor
(7 x 4) = 28 credits

Example: A student is enrolled in B.A. (Hons.) History and decides to pursue 4th year (sem VII + sem VIII).

If he successfully completes the 4th year, he/she will be awarded **Major in History**.

In addition, if the student successfully completes, seven GEs in Political Science, he/she will be awarded **Minor in Political Science**.



Structure of UG Three Core Discipline Programs (B.Sc. Programmes)

In the fourth year (Sem VII and Sem VIII), students will study only one of the discipline i.e., either A or B or C in both of the semesters. .

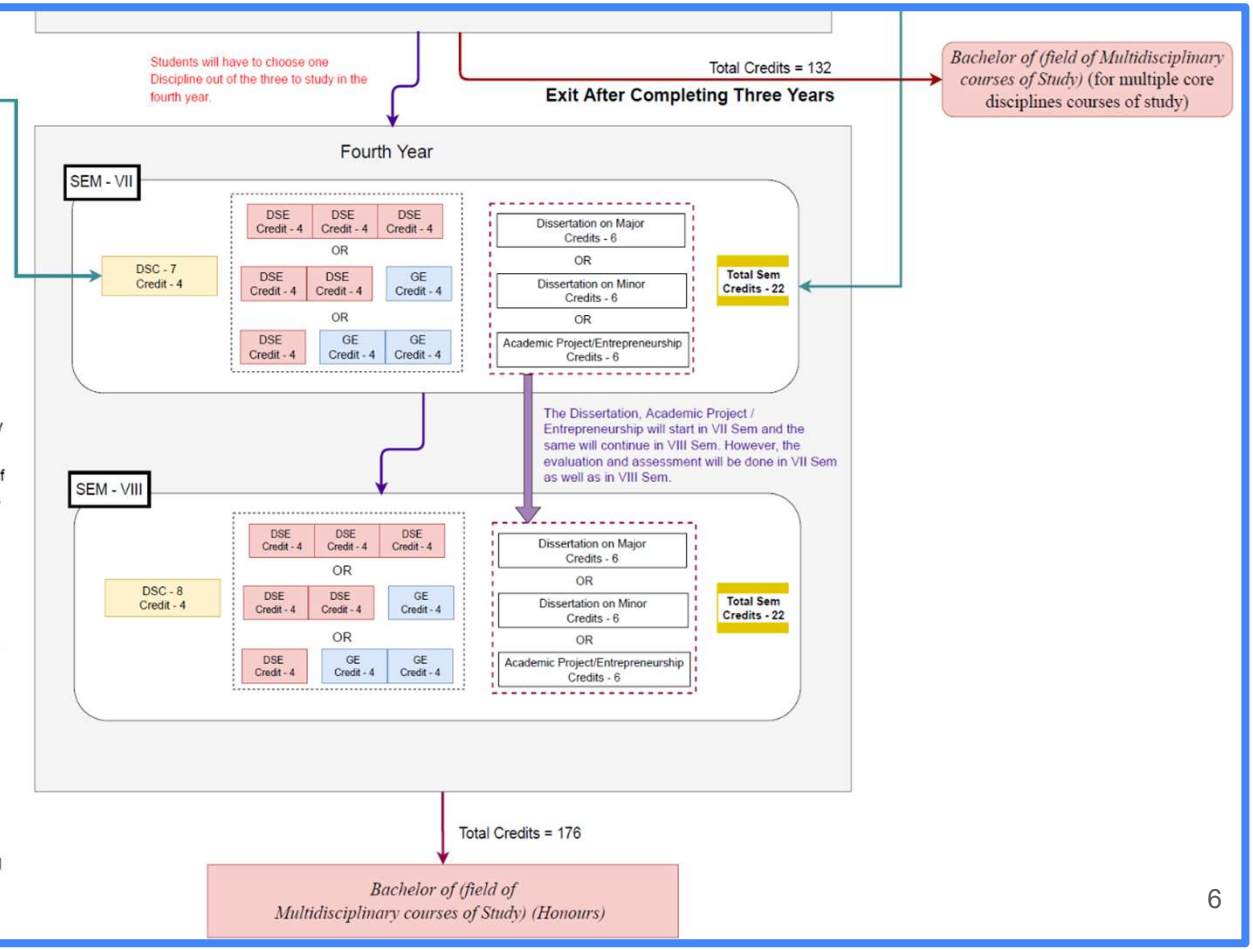
Honours Degree: To pursue an Honours degree in a field of multidisciplinary study, candidates will have to choose, in the fourth year, only one of the disciplines (either A or B or C).
Candidates will have to study **Two** DSCs and **Six** DSEs in the chosen discipline in the VII and VIII semesters and write dissertation.

Major and Minor shall be awarded on fulfilment of the following conditions.
Major -> 80 credits, Minor -> 28 credits

Example: B.Sc. Life Sciences programme with Botany, Zoology and Chemistry as core disciplines.
Case I: He/She shall get **Major** in Botany, on successful completion of VIII semester, if he/she earns minimum 80 credits in Botany from **Eight** DSCs and at least **Nine** DSEs of Botany and writes dissertation in Botany.
Advice: Students are advised to choose the discipline in which they wish to Major and must study at least **Three DSEs** of that discipline in the first three years. Like in this example, student must decide earlier and study three DSEs of Botany in the first three years as only maximum of six DSEs are available in fourth year. Similarly, If the student want to minor in any of the remaining two disciplines, he/she should study one DSE of that discipline in the first three years.

He/She shall get a Minor in Zoology, if he/she earns minimum 28 credits from **Six** DSCs and **one** DSE of Zoology. Or
He/She shall get a Minor in Chemistry, if he/she earns minimum 28 credits from **Six** DSCs and **One** DSE of Chemistry.

Case II: If a student doesn't do dissertation in Botany, but in other disciplines, say Zoology or Chemistry, or does Academic Project or Entrepreneurship, then he/she will not be awarded Major in Botany as he/she will be unable to get 80 credits. in such cases, he/she will be awarded B.Sc. (Honours) Life Sciences.



Structure of UG Three Core Discipline Programs (B.Sc. Programmes)

In the fourth year (Sem VII and Sem VIII), students will study only one of the discipline i.e., either A or B or C in both of the semesters.

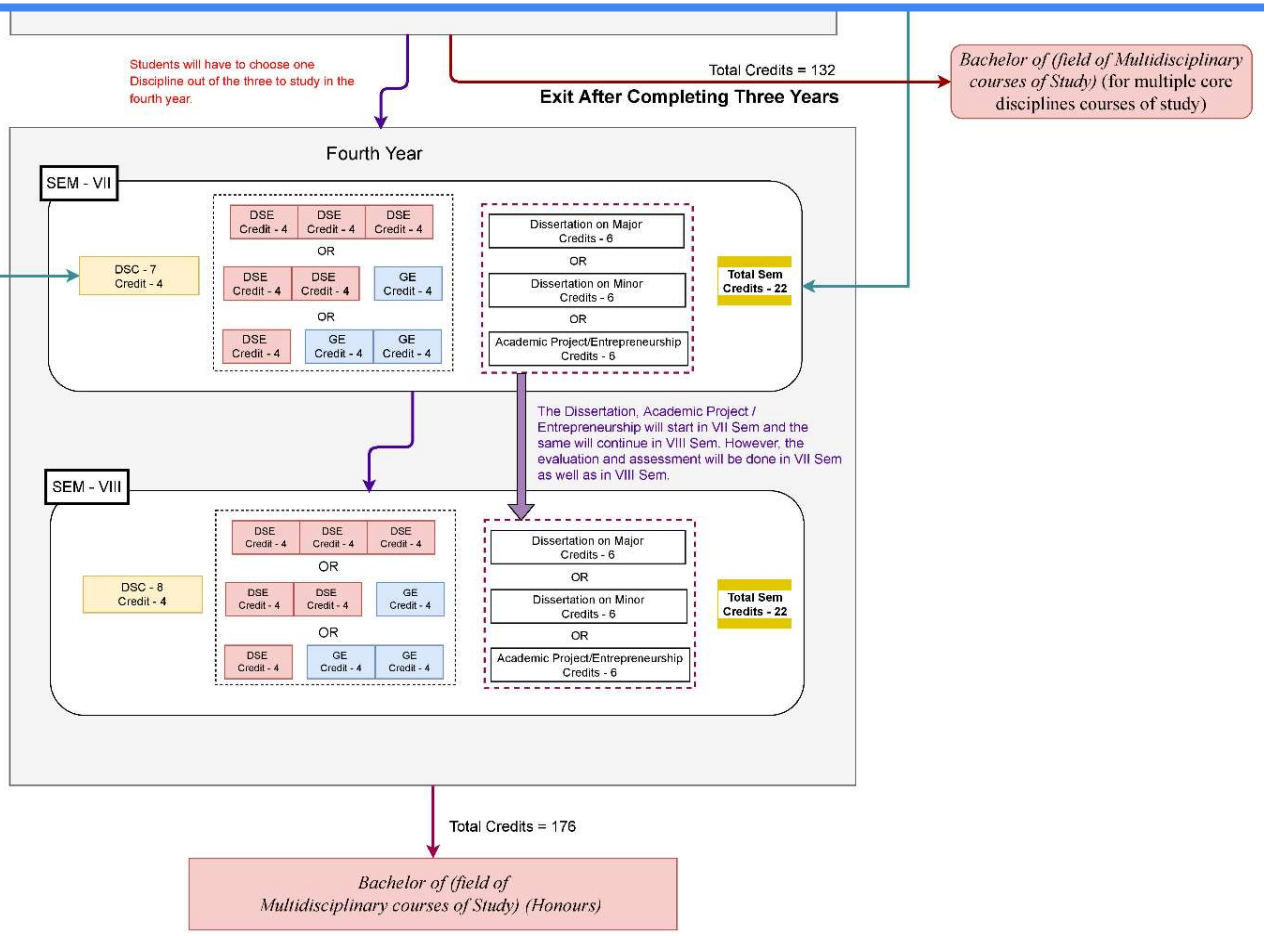
Honours Degree: To pursue an Honours degree in a field of multidisciplinary study, candidates will have to choose, in the fourth year, only one of the disciplines (either A or B or C).
Candidates will have to study **Two** DSCs and **Six** DSEs in the chosen discipline in the VII and VIII semesters and write dissertation.

Major and Minor shall be awarded on fulfilment of the following conditions.
Major -> 80 credits, Minor -> 28 credits

Example: B.Sc.(P) Physical Sciences with Computer Science program with Physics, Mathematics and Computer Science as core disciplines.
Case I: He/She shall get **Major** in Physics, on successful completion of VIII semester, if he/she earns minimum 80 credits in Physics from **Eight** DSCs and at least **Nine** DSEs of Physics and writes dissertation in Physics.
Advice: Students are advised to choose the discipline in which they wish to Major and must study at least **Three DSEs** of that discipline in the first three years. Like in this example, student must decide earlier and study three DSEs of Physics in the first three years as only maximum of six DSEs are available in fourth year. Similarly, If the student want to minor in any of the remaining two disciplines, he/she should study one DSE of that discipline in the first three years.

He/She shall get a Minor in Mathematics, if he/she earns minimum 28 credits from **Six** DSCs and **one** DSE of Mathematics. Or
He/She shall get a Minor in Computer Science, if he/she earns minimum 28 credits from **Six** DSCs and **One** DSE of Computer Science.

Case II: If a student doesn't do dissertation in Physics, but in other disciplines, say Mathematics or Computer Science, or does Academic Project or Entrepreneurship, then he/she will not be awarded Major in Physics as he/she will be unable to get 80 credits. In such cases, he/she will be awarded B.Sc. (Honours) Physical Sciences with Computer Science.



Distribution of Credits

Distribution of Credits

4th Year of UG as per UGCF 2022

Semester	DSC	DSE	Dissertation/Academic Project/ Entrepreneurship		Total Credits
Semester-VII	**1 DSC** **(4 credits)**	**3 DSEs** OR **2 DSEs & 1 GE** OR **1DSE & 2GEs** **(12 credits)**	Only one to be opted throughout the 4th year, with assessment of specified outcomes at the end of VII and VIII semesters **(6 credits)**		**22**
Semester-VIII	**1 DSC** **(4 credits)**	**3 DSEs** OR **2 DSEs & 1 GE** OR **1DSE & 2 GEs** **(12 credits)**	Continuation and completion of the chosen option **(6 credits)**		**22**

(Proposal for an option) for 4th Year UGCF Structure for Three Core Discipline Programs

- Students of B.Sc. (P) will get a simple degree after completion of 3rd year and an Honours degree after completion of 4th year.
- B.Sc. (P) Students **will not get** 'Honours with Research' degree after completion of the 4th year even though such students write 'Dissertation' or do 'Academic Projects'.
- B.Sc. (P) Students may therefore be given a choice of studying purely course work without having to do any of the three tracks envisaged (i.e. Dissertation/ Academic Project/ Entrepreneurship)
- However, this facility cannot be extended to Single-core programme students.

(Proposal for an option) for 4th Year UGCF Structure for Three-core Programs

Option for Coursework instead of writing Dissertation/ Academic Projects/ Entrepreneurship may be open to the choice of students who are pursuing B.Sc. Programs.

(Proposal for an option)

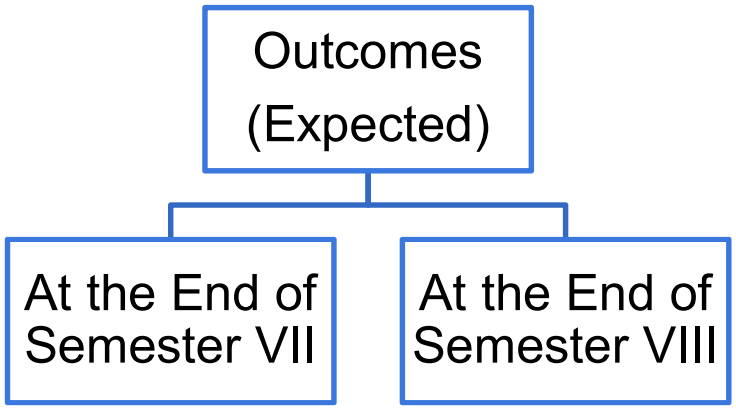
Distribution of Credits: Option for Three-Core Programs

Semester	DSC	DSE	2 Credit course	Total Credits
Semester-VII	DSC (04 credits)	DSE - 1 DSE – 2 DSE – 3 DSE - 4 OR DSE-1, 2 & 3 GE-1 (16 credits)	Skill-based course/ workshop/ Specialised laboratory/ Hands on Learning (2 credits)	22
Semester-VIII	DSC (04 credits)	DSE- 5 DSE – 6 DSE – 7 DSE - 8 OR DSE- 4, 5 & 6 GE-2 (16 credits)	Skill-based course/ workshop/ Specialised laboratory/ Hands on Learning (2 credits)	22

The Three Tracks

- Dissertation writing
- Academic Projects
- Entrepreneurship

Outcomes Expected: Dissertation Writing Track



Outcomes Expected: Dissertation Writing Track

In Semester VII

The following four outcomes must be achieved by the end of VII Semester:

1. Research Problem identification
2. Review of literature
3. Research design formulation
4. Commencement of experimentation, fieldwork, or similar tasks

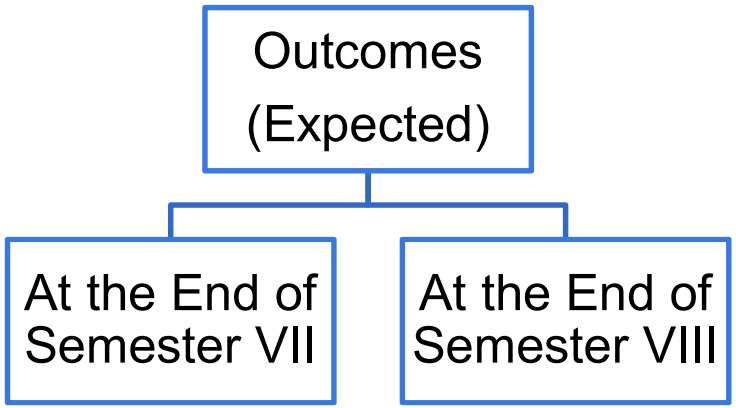
Outcomes Expected: Dissertation Writing Track

In Semester VIII

The following three outcomes must be achieved by the end of VIII Semester:

1. Completion of experimentation/field work
2. Submission of dissertation
3. Research output in the form of any one of the following:
    - Prototype or product development/ patent
    - Any other scholastic work as recommended by the DRC & BRS and approved by the Research Council
    - Publication in a reputed Journals such as Scopus indexed journals or other similar quality journals
    - Book or Book Chapter in a publication by a reputed publisher

Outcomes Expected: Academic Projects Track



Outcomes Expected: Academic Projects Track

Academic Project should be **an application based research** (not an exploratory or descriptive research) or **a real-life problem solving research** or **a book translation** or **projects leading to creation of a new product** (such as those of Bachelor of Fine Arts).

Outcomes Expected: Academic Projects Track

Semester VII

The following four outcomes must be achieved by the end of VII Semester:

1. Problem identification
2. Review of literature
3. Design formulation
4. Commencement of experimentation, fieldwork, or similar tasks

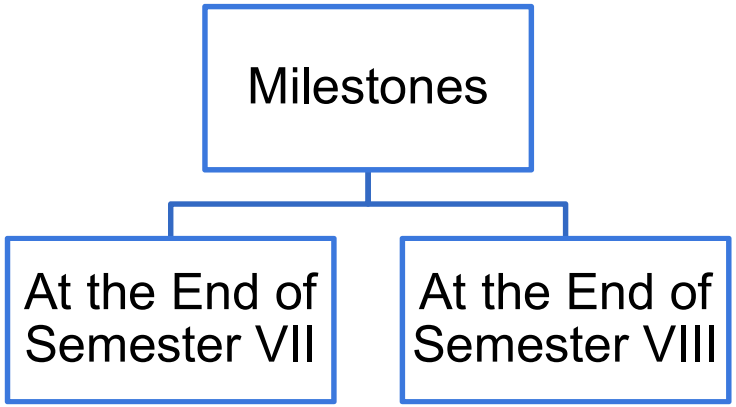
Outcomes Expected: Academic Projects Track

Semester VIII

The following three outcomes must be achieved by the end of VIII Semester:

1. Completion of the experimentation, fieldwork or similar task.
2. Submission of project report
3. Project output in the form of any one of the following
   - Prototype or product development or patent
   - Any other scholastic work as recommended by the DRC & BRS and approved by the Research Council
   - Publication in a reputed Journals such as Scopus indexed journals or other similar quality journals
   - Draft policy formulation and submission to the concerned Ministry
   - Book or Book Chapter in a publication by a reputed publisher
   - Book translation (for Language departments)

Outcomes Expected: Entrepreneurship



Milestones for Semester VII: EntrepreneurshipTrack

Milestones for VII Semester:				
Week (Tentative)	**Topic**	**Deliverable**	**Activities**	**Mentor Checkpoint**
1-2	**Idea Generation and Validation**	Submission of at least two potential start-up ideas.	Conduct market research to validate the viability of each idea.	Review and feedback on the initial ideas.
3-4	**Finalizing the Business Idea**	Selection of the final business idea based on research and mentor feedback.	Develop a preliminary business model canvas.	Approval of the final business idea.
5-6	**Market Research and Customer Discovery**	Detailed market research report and customer discovery interviews.	Identify target market, customer segments, and key competitors.	Presentation of market research findings.
7-14	**Prototype Development/Minimum Viable Product (MVP) and Business Model Refinement**	Development of a prototype or MVP. Refined business model canvas including value proposition, customer segments, and revenue streams.	Design and build a basic version of the product or service. Test and iterate the business model based on prototype/MVP feedback.	Prototype/MVP review and feedback.

Milestones for Semester VII: EntrepreneurshipTrack

11-12	**Financial and Legal Planning**	Initial financial plan including cost structure, pricing strategy, and funding requirements.	Prepare a basic financial plan, including a budget and revenue forecast; review IPR potential	Financial plan and IPR review.
13-14	**Pitch Preparation**	Development of a pitch deck summarizing the business idea, market opportunity, prototype, and financials.	Create and refine a presentation for potential investors or stakeholders.	Practice pitch session with feedback.
15-16	**Final Presentation and Review**	Final pitch presentation to a panel of mentors, faculty, and possibly industry experts.	Deliver a polished pitch, receive feedback, and make final adjustments.	Final assessment and grading based on the pitch and overall progress throughout the semester.

Milestones for Semester VIII: EntrepreneurshipTrack

Milestones for VIII Semester:				
Week (Tentative)	**Topic**	**Deliverable**	**Activities**	**Mentor Checkpoint**
1-2	**Review and Refinement of Prototype/ MVP**	Review of the progress made in the 7th semester, including feedback from the final pitch.	Refine the business model, prototype, and financial plan based on mentor feedback and learnings from the 7th semester.	Review and approval of the refined business plan and prototype/MVP
3-12	**Legal and Regulatory Compliance**	Documentation of all legal requirements, including business registration, intellectual property rights, and compliance with industry-specific regulations.	Complete the legal registration of the business and ensure all necessary licenses and permits are obtained	Legal compliance review and feedback.

Milestones for Semester VIII: EntrepreneurshipTrack

5-8	**Operational Planning**	Detailed operational plan, including supply chain management, production schedules, and quality assurance processes.	Finalize partnerships with suppliers, set up production or service delivery processes, and establish quality control measures.	Review and approval of the operational plan.
5-10	**Marketing and Sales Strategy**	Comprehensive marketing and sales plan, including market entry strategy, branding, and pricing.	Develop and test marketing campaigns, refine branding and messaging, and establish sales channels.	Marketing and sales strategy review and feedback.

Milestones for Semester VIII: EntrepreneurshipTrack

9-14	**Financial Planning and Fundraising**	Finalized financial plan, including cash flow projections, break-even analysis, and funding requirements.	Prepare for fundraising by identifying potential investors, preparing financial documents, and practicing pitches.	Financial plan review and practice pitch sessions.
9-14	**Risk Management and Contingency Planning**	Risk management plan detailing potential risks and corresponding mitigation strategies.	Identify key risks (e.g., market, operational, financial) and develop contingency plans.	Risk management plan review and feedback.

Milestones for Semester VIII: EntrepreneurshipTrack

13-14	**Final Preparations for Launch**	Final preparations for market launch, including any final adjustments to the product/service, operational processes, and marketing efforts.	Conduct a soft launch or beta testing phase to gather final feedback, finalize logistics, and ensure readiness for full market entry.	Review and approval of launch readiness.
15-16	**Final Presentation and Review**	Comprehensive final presentation summarizing the entire project, including business model, operations, financials, marketing, and launch plan.	Deliver the final pitch to a panel of mentors, faculty, and industry experts, followed by the official market launch.	Final evaluation and feedback, with an emphasis on the feasibility of the launch and overall project success.

Type of Award of Degree

If a student exits after 3 years

- For Single-core Discipline Programs

Bachelor of (Field of Study) (Honours) Discipline

- For Three-core Discipline Programs

Bachelor of (Field of Multidisciplinary courses of Study)

Type of Award of Degree

After the Completion of 4 years

- For Single-core Discipline Programs

Bachelor of (Field of Study/ Discipline) (Honours with Research / Academic Projects/ Entrepreneurship) Discipline

- For Three-core Discipline Programs

Bachelor of (Field of Multidisciplinary courses of Study) (Honours)

Thanks