(For students admitted in 2018-19 and before)

Undergraduate Minor Program in Design

The Minor Program in Design is designed mainly for engineering students, but is also open to all students to apply. Any undergraduate students with an overall CGA of 2.5 or above may enroll in this Minor Program. Students must declare their intention to enroll in the Minor Program no earlier than the first regular term of their second year of study but no later than the last day of the add/drop period in the first regular term of their final year of study. Students who wish to withdraw from the Minor Program should apply before the last day of the add/drop period in the last regular term of their final year of study.

Minor Requirements

To graduate with a minor in Design, the students must have enrolled in the Minor Program and completed a minimum total of 18 credits and all of its requirements, as well as all the requirements of their major program of study.

For credit transfer, students can transfer a maximum total of 6 credits to the Minor Program.

Out of the total credits required by the minor program, at least 9 credits should be single-counted within the minor and are not used to fulfill any other requirements for graduation except the 120-credit degree requirement.

Students may use no more than 6 credits earned from courses offered in pure online delivery mode to satisfy the graduation requirements of a degree program. This 6-credit limit does not apply to credits obtained through the credit transfer procedures of the University.

Required Course(s)

			Credit(s) attained
IEDA/MARK		Note: IEDA 4650 OR COMP 4461 OR MARK 3220 OR MARK 3450	3-4
IEDA	4650	Engineering Psychology	3
COMP	4461	Human-Computer Interaction	3
MARK	3220	Marketing Research	4
MARK	3450**	Analytical Techniques for Product Marketing	4
ISDN	4320	Design Thinking	3

Elective(s)

			Minimum credit(s) required
IEDA/ENGG/ HART/SOSC		Design Foundation Electives (Courses from the specified elective list)	6
IEDA	2145**	Design Studio	3
IEDA	2150	Product Design	3
ENGG	1200	Engineering Team Design Experience: Airship	3
HART	1001	Arts and Creativity	2
HART	1036	Introduction to Graphic Design	1
SOSC	2170	Environment, Sustainability and Business: A Design Approach	3

SENG		Design Focus Electives (Courses from the specified elective list. No more than one course within the same course groups of ELEC 3300 / IEDA 2100 / MECH 2907 and IEDA 4170 / MECH 3510 may be counted towards the elective requirement. Courses taken as Required Courses may not be counted towards the elective requirement.)	6
IEDA	2100	Computing in Industrial Applications	3
IEDA	3130	Ergonomics and Safety Management	3
IEDA	4170	Product Design and Lifecycle Management	3
BIEN	3010	Biodesign: A Taste of Solving Real-Life Healthcare Problems	3
COMP	4411	Computer Graphics	3
COMP	4451	Game Programming	3
COMP	4461	Human-Computer Interaction	3
COMP	4521	Mobile Application Development	3
ELEC	3170	Digital Media and Multimedia Applications	4
ELEC	3300	Introduction to Embedded Systems	4
MECH	2907	Mechatronic Design and Prototyping	3
MECH	3510	CAD/CAM	3

**Remarks on course(s):		
-	IEDA 2145:	The course was last offered in 2014-15 and was deleted subsequently.
-	MARK 3450:	The course was last offered in 2014-15 and was deleted subsequently.

(For students admitted in 2019-20 and after)

Undergraduate Minor Program in Design

Except for those studying in the BSc program in Integrative Systems and Design, any undergraduate students with an overall CGA of 2.5 or above may enroll in this Minor Program. Students must declare their intention to enroll in the Minor Program no earlier than the first regular term of their second year of study but no later than the last day of the add/drop period in the first regular term of their final year of study. Students who wish to withdraw from the Minor Program should apply before the last day of the add/drop period in the last regular term of their final year of study.

Minor Requirements

To graduate with a minor in Design, the students must have enrolled in the Minor Program and completed a minimum total of 18 credits and all of its requirements, as well as all the requirements of their major program of study.

For credit transfer, students can transfer a maximum total of 6 credits to the Minor Program.

Out of the total credits required by the minor program, at least 9 credits should be single-counted within the minor and are not used to fulfill any other requirements for graduation except the 120-credit degree requirement.

Students may use no more than 6 credits earned from courses offered in pure online delivery mode to satisfy the graduation requirements of a degree program. This 6-credit limit does not apply to credits obtained through the credit transfer procedures of the University.

Required Course(s)

			Credit(s) attained
ISDN/ENGG		Note: Design Fundamentals: ISDN 1002 OR ISDN 1006 OR ENGG 1300	3
ISDN	1002	Redefining Problems for the Real Needs	3
ISDN	1006	Human-centered Innovation	3
ENGG	1300	Design Thinking for Health Innovation	3
ISDN		Note: Design: ISDN 2000 OR ISDN 2200 OR ISDN 2300 OR ISDN 2400 OR ISDN 2500 OR ISDN 3100 (2 courses out of 6)	5-6
ISDN	2000	What is Design and Why Design?	3
ISDN	2200	Systems Thinking and Design	3
ISDN	2300	Digital Design	3
ISDN	2400	Physical Prototyping	3
ISDN	2500	Introduction to Systems Design Engineering	3
ISDN	3100	Design for Sustainability	2
ISDN		Note: Design Project Experience: ISDN 3350 OR ISDN 3360 OR ISDN 4320	3
ISDN	3350	Global Product Development	3
ISDN	3360	From Product Innovations to Successful Technology Startups	3
ISDN	4320	Design Thinking	3

Elective(s)

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Minimum credit(s) required

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SENG		Design Electives (Courses from the specified list. Students are required to take a minimum total of 6 credits, while students who have taken ISDN 3100 as Required Course should take a minimum total of 7 credits. At least 3 credits must be at 3000-level or above and no more than 3 credits can be taken at 1000-level. Courses taken as Required courses may not be counted toward the elective requirement.)	6-7

Courses offered by the School of Engineering

ISDN	1002	Redefining Problems for the Real Needs	3
ISDN	1006	Human-centered Innovation	3
ISDN	2000	What is Design and Why Design?	3
ISDN	2200	Systems Thinking and Design	3
ISDN	2300	Digital Design	3
ISDN	2400	Physical Prototyping	3
ISDN	2500	Introduction to Systems Design Engineering	3
ISDN	3100	Design for Sustainability	2
ISDN	3200	Graphic Design	2
ISDN	3300	Interaction Design	2
ISDN	3350	Global Product Development	3
ISDN	3360	From Product Innovations to Successful Technology Startups	3
ISDN	4200	Product Management	3
ISDN	4300	Materials Selection in Product Design	3
ISDN	4320	Design Thinking	3
BIEN	3010	Biodesign: A Taste of Solving Real-Life Healthcare Problems	3
CENG	1600	Biotechnology and Its Business Opportunities	3
CENG	2110	Process and Product Design Principles	3
COMP	1943	Creative Sound Design	3
COMP	3711	Design and Analysis of Algorithms	3
COMP	4451	Game Programming	3
COMP	4461	Human-Computer Interaction	3
COMP	4521	Mobile Application Development	3
ELEC	1020	Media Production: Technology and Design	3
ELEC	1100	Introduction to Electro-Robot Design	4
ELEC	3170	Digital Media and Multimedia Applications	4
ELEC	3300	Introduction to Embedded Systems	4
ELEC	3500	Microelectronic Devices and Technology	4
ELEC	4310	Embedded System Design	4
ENGG	1300	Design Thinking for Health Innovation	3
IEDA	2100	Computing in Industrial Applications	3
IEDA	2150	Product Design	3
IEDA	3130	Ergonomics and Safety Management	3
IEDA	4170	Product Design and Lifecycle Management	3
IEDA	4650	Engineering Psychology	3

MECH	2520	Design and Manufacturing I	3
MECH	2907	Mechatronic Design and Prototyping	3
MECH	3510	CAD/CAM	3
MECH	3520	Design and Manufacturing II	3
MECH	3620	Aircraft Design	3

Courses offered by the School of Science

CHEM	1002	Introduction to Chemistry of Cosmetics	3
PHYS	1003	Energy and Related Environmental Issues	3

Courses offered by the School of Business and Management

ISOM	1380	Technology and Innovation: Social and Business Perspectives	3
ISOM	2030	Business Protections for Innovations	3
ISOM	2700	Operations Management	3
ISOM	3210	Information Systems Analysis and Design	3
MARK	2120	Marketing Management	3
MARK	3220	Marketing Research	4
MARK	3420	Consumer Behavior	4

Courses offered by the School of Humanities and Social Science

HART	1001	Arts and Creativity	2
HART	1034	Light and Art	1
HART	1036	Introduction to Graphic Design	1
HUMA	2680	Understanding Western Architecture	3
HUMA	3201	Animation: A Global Perspective	3
SOSC	2170	Environment, Sustainability and Business: A Design Approach	3
SOSC	3260	Sustainability Science: Policy Problems and Perspectives	3

Courses offered by the Interdisciplinary Programs Office

ENVR	1080	The Smart Consumer - Uncovering the Hidden Story behind the Product Label	3
ENVR	2040	Life Cycle Assessment	3
ENVR	3003	Green Buildings and Energy Efficiency	3
ENVR	3110	Sustainable Development	3
ENVR	3210	Environmental Technology	3
ENVR	4220	Urban and Regional Planning	3