

IPSE UG Students Enrolled in Fall 2010 through 2017

Summary Table of Changes in IPSE Group C Courses Offered by

Dept. of Computer Science & Engineering, School of Fundamental Sci. & Eng.

For Fall 2020 course registration periods

* You need to earn credits of Group C courses provided as "required", "elective required" or "elective" for your enrollment year. Please refer to column [A], [B], [C] or [D] here below **according to your enrollment year**. Also check the relevant pages of your enrollment year's Handbook.

[A]	[B]	[C]	[D]	Number of credits	Number of class hours per week (* a 90-minute long class (per week) is shown as 2 (hours) in the table below)								Current Course Availability by Your Enrollment Year				Note	
					First year		Second year		Third year		Fourth year		O: available X: not available *: conditionally available (see Note section)					
					Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.	Spring sem.	For students enrolled in Fall 2010/2011	For students enrolled in Fall 2012	For students enrolled in Fall 2013	For students enrolled in Fall 2014/2015/2016/2017		
Research Project B	Research Project B	Research Project B	Research Project B	4							2			O (required)	O (required)	O (required)	O (required)	
Research Project C	Research Project C	Research Project C	Research Project C	4								2		O (required)	O (required)	O (required)	O (required)	
Introduction to Computer Science	-	-	-	2	2									*	X	X	X	* originally allocated to fall semester of 1st year, but from spring 2013, CHANGED TO spring semester of 1st year. * Another class available from fall 2014; allocated to 1st year. * For students enrolled in Fall 2012, Fall 2013, Fall 2014 & Fall 2015, this course replaced "Introduction to Computer Science (spring, 1st year)" classified as a Group B Required course from fall 2012. * For fall semester 2015, there is only one class available.
Modeling	-	-	-	2		2								X	X	X	X	* course cancelled from spring 2014
Circuit Theory A	Circuit Theory A	Circuit Theory A	Circuit Theory A >Circuit Theory A	1			2 first-half							O (elective required)	O (elective required)	O (elective required)	O (elective required)	* this course is divided into Circuit Theory A and Circuit Theory B from 2019.
Circuit Theory A	Circuit Theory A	Circuit Theory A	Circuit Theory A >Circuit Theory B	1			2 Second-half							O (elective required)	O (elective required)	O (elective required)	O (elective required)	
Logic Circuits	Logic Circuits	Logic Circuits	Logic Circuits	2			2							O (elective required)	O (elective required)	O (elective required)	O (elective required)	

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Carriculum for Students Enrolled in Fall 2010/ 2011	Carriculum for Students Enrolled in Fall 2012	Carriculum for Students Enrolled in Fall 2013	Carriculum for Students Enrolled in Fall 2014/ 2015/ 2016/2017		First year		Second year		Third year		Fourth year		O: available X: not available *: conditionally available (see Note section)				
					Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.	Spring sem.	For students enrolled in Fall 2010/ 2011	For students enrolled in Fall 2012	For students enrolled in Fall 2013	For students enrolled in Fall 2014/ 2015/ 2016/2017	
Fundamentals of Programming	Fundamentals of Programming	Fundamentals of Programming	Fundamentals of Programming	2				4 first-half					O (elective required)	O (elective required)	O (elective required)	O (elective required)	* originally allocated to fall semester of 2nd year, but from spring 2018, CHANGED TO first-half spring semester of 2nd year.
Mathematical Foundations of Computer Science	-	-	-	2			2						O (elective required)	*	*	*	* For students enrolled in Fall 2012, Fall 2013, Fall 2014 & Fall 2015, this course cancelled from fall 2012. Replacement course is available; Discrete Mathematics has the same content of the cancelled course. If you earn the credit of Discrete Mathematics, it is counted as a Group B elective required.
Algorithms and Data Structures	Algorithms and Data Structures	Algorithms and Data Structures	Algorithms and Data Structures	2				2					O (elective required)	O (elective required)	O (elective required)	O (elective required)	
Computer Systems	Computer Systems	Computer Systems	Computer Systems	2			2	2					O (elective required)	O (elective required)	O (elective required)	O (elective required)	* this course CHANGED TO fall semester of 2nd year.
Signal Processing	Signal Processing	Signal Processing	Signal Processing	2					2				O (elective required)	O (elective required)	O (elective required)	O (elective required)	
Computer Science and Engineering Laboratory	Computer Science and Engineering Laboratory	Computer Science and Engineering Laboratory	Computer Science and Engineering Laboratory	2					4				O (elective required)	O (elective required)	O (elective required)	O (elective required)	* number of class hours per week changed from fall 2012.
Information Network Systems	Information Network Systems	Information Network Systems	Information Network Systems	2					2				O (elective required)	O (elective required)	O (elective required)	O (elective required)	* this course is canceled from 2020.
Research Project A	Research Project A	Research Project A	Research Project A	2					2				O (elective required)	O (elective required)	O (elective required)	O (elective required)	
Operating Systems	Operating Systems	Operating Systems	Operating Systems	2						2			O (elective required)	O (elective required)	O (elective required)	O (elective required)	
Information Security > Information Security Basics	Information Security > Information Security Basics	Information Security > Information Security Basics	Information Security > Information Security Basics	2						2			O (elective required)	O (elective required)	O (elective required)	O (elective required)	* course name changed from spring 2014. * course cancelled from spring 2019.
Research Project D	Research Project D	Research Project D	Research Project D	2							2		O (elective required)	O (elective required)	O (elective required)	O (elective required)	

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					Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.	Spring sem.	For students enrolled in Fall 2010/ 2011	For students enrolled in Fall 2012	For students enrolled in Fall 2013	For students enrolled in Fall 2014/ 2015/ 2016/2017		
Electrodynamics	Electrodynamics	Electrodynamics	Electrodynamics	2										O (elective)	O (elective)	O (elective)	O (elective)	* originally allocated to spring semester of 2nd year, but from spring 2017, CHANGED TO spring semester of 3rd year. * course cancelled from spring 2018.
Electronic Circuits	Electronic Circuits	Electronic Circuits	Electronic Circuits	2						2				O (elective)	O (elective)	O (elective)	O (elective)	* course cancelled from fall 2020.
Communication Systems	Communication Systems	Communication Systems	Communication Systems	2						2				O (elective)	O (elective)	O (elective)	O (elective)	* not available for Fall 2018. * course cancelled from fall 2019.
Software Engineering	Software Engineering	Software Engineering	Software Engineering	2						2				O (elective)	O (elective)	O (elective)	O (elective)	
Teletraffic Theory	Teletraffic Theory	Teletraffic Theory	Teletraffic Theory	2						2				O (elective)	O (elective)	O (elective)	O (elective)	
Info-Telecommunication and the Standardization	Info-Telecommunication and the Standardization	Info-Telecommunication and the Standardization	Info-Telecommunication and the Standardization	2						2				O (elective)	O (elective)	O (elective)	O (elective)	
-	-	Information Telecommunication Systems	Information Telecommunication Systems	2						4				X	X	X	X	* course cancelled from fall 2015.
Information Theory	Information Theory	Information Theory	Information Theory	2										O (elective)	O (elective)	O (elective)	O (elective)	* number of class hours per week changed from spring 2014. * this course allocated the first-half spring semester of the 3rd year. * this course CHANGED TO spring semester of 2nd year.
Transmission Theory	Transmission Theory	Transmission Theory	Transmission Theory	2						2				O (elective)	O (elective)	O (elective)	O (elective)	* course cancelled from spring 2020.
Wireless Communication	Wireless Communication	Wireless Communication	Wireless Communications	2										O (elective)	O (elective)	O (elective)	O (elective)	
Multimedia Systems	Multimedia Systems	Multimedia Systems	Multimedia Systems	2						2	2			O (elective)	O (elective)	O (elective)	O (elective)	* this course CHANGED TO fall semester of 3rd year.
Mobile Communications	Mobile Communications	Mobile Communications	Mobile Communications	2										O (elective)	O (elective)	O (elective)	O (elective)	* course cancelled from spring 2020.

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-	-	Introduction to Computer Graphics and Image Processing > Image Engineering Fundamentals	Introduction to Computer Graphics and Image Processing > Image Engineering Fundamentals	2										O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 3rd year * originally allocated to fall semester of 3rd year, but from spring 2016, CHANGED TO spring semester of 3rd year. * Not available for spring 2016 * course name changed from spring 2017.		
Network Engineering	Network Engineering	Network Engineering	Network Engineering	2										2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from fall 2016; allocated to 4th year	
-	-	Perceptual Computing	Perceptual Computing	2											2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from fall 2016; allocated to 4th year
-	-	Wireless Communications Network	Wireless Communications Network	2											2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from fall 2016; allocated to 4th year * not available for fall 2020.
-	-	Digital Imaging	Digital Imaging	2											2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from fall 2016; allocated to 4th year * course cancelled from fall 2018.
-	-	Theory of Computer Software	-												2	X	X	X	X	* course cancelled from fall 2014.
-	-	Information Retrieval	Information Retrieval	2											2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from fall 2016; allocated to 4th year
-	-	Digital System Design	Digital System Design	2											4 second-half	O (elective)	O (elective)	O (elective)	O (elective)	* this course allocated the second-half fall semester of the 4th year. * new course is available from fall 2016; allocated to 4th year
-	-	Advanced Intelligent Software	Advanced Intelligent Software	2											2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from fall 2016; allocated to 4th year
-	-	Sound and Perception	-												2	X	X	X	X	* course cancelled from fall 2014.

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-	-	Analysis of Networked Systems	Analysis of Networked Systems	2							2		O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from fall 2016; allocated to 4th year
-	-	-	Cloud Systems	2							2		O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from fall 2016; allocated to 4th year
-	-	-	Advanced Wireless Access	2							2		O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from fall 2016; allocated to 4th year
-	-	-	Algorithms in Computational Biology	2							2		O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from fall 2016; allocated to 4th year
Image Processing	Image Processing	Image Processing	Image Processing	2							2		O (elective)	O (elective)	O (elective)	O (elective)	
-	-	Advanced Image Information	Advanced Image Information	2							2		O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 4th year
-	-	Advanced Information Networks	Advanced Information Networks	2							2		O (elective)	O (elective)	O (elective)	O (elective)	* course cancelled from spring 2017.
-	-	Reliable Software	Reliable Software	2							2		O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 4th year
-	-	Information Integration of Symbols and Patterns	Information Integration of Symbols and Patterns	2							2		O (elective)	O (elective)	O (elective)	O (elective)	* course cancelled from spring 2017.

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-	-	Distributed Embedded and Real-Time Processing	Distributed Embedded and Real-Time Processing	2								2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 4th year * originally allocated to spring semester of 4th year, but from spring 2017, CHANGED TO fall semester of 4th year.
-	-	-	Business and Global Standardization	2								2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 4th year
-	-	Advanced Computer Architecture	Advanced Computer Architecture	2								2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 4th year. * not available for spring 2019. * not available for spring 2020.
-	-	Advanced Processor Architecture	Advanced Processor Architecture Technology	2								2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 4th year
-	-	Wireless Signal Processing	Wireless Signal Processing	2								2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 4th year
-	-	Software Quality Assurance	Software Quality Assurance	2								2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 4th year
-	-	Computer Vision and Pattern Analysis	Computer Vision and Pattern Analysis	2								2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 4th year
-	-	Foundation for Information Access Evaluation	Foundation for Information Access Evaluation	2								2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 4th year * not available for spring 2020.
-	-	-	Pattern Recognition and Machine Learning	2								2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 4th year
-	-	-	Data Mining	2								2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2017; allocated to 4th year
-	-	-	Design and Implementation of Programming Languages	2								2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from fall 2017; allocated to 4th year