## 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 Spring 2017 course registration periods

- 1. Tables herein after show you history of changes in IPSE courses in comparison to the course lists shown on your enrollment year's Handbook.
- 2. Based on the course tables (Group A1) on your enrollmen year's Handbook, the Tables herein after include.
- 3. Courses newly available, cancelled, with course names modified, with allocation semester/year changed, and so forth in comparison to the course lists shown in your enrollement year's Handbook are shown.
- 4. Some PDF is divided into several sheets. Scroll down till the end when you see these PDF.

<sup>\*</sup> 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 <u>according to your enrollment year</u>. Also check the relevant pages of your enrollment year's Handbook.

[A]	[B]	[C]	[D]		Numbe			week (* a 2 (hours)				veek) is	Current Cou	rse Availabilit	ty by Your En	ollment Year	
	Carriculum for Students Enrolled	Carriculum for Students Enrolled in Fall 2014/ 2015/ 2016	Number of credits	First year		Second year		Third year		Fourth year			X: not a	railable available ally available e section)		Note	
in Fall 2010/ 2011				Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.	Spring sem.	For students enrolled in Fall 2010/ 2011		Fall 2013	For students enrolled in Fall 2014/ 2015/ 2016		
Research Project B	Research Project B	Research Project B	Research Project B	4						2			O (requireed)	O (requireed)	O (requireed)	O (requireed)	
Research Project C	Research Project C	Research Project C	Research Project C	4							2		O (requireed)	O (requireed)	O (requireed)	O (requireed)	
Introduction to Computer Science	-	-	-	2	2								*	х	Х	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	2			2						O (elective requireed)	O (elective requireed)	O (elective requireed)	O (elective requireed)	
Logic Circuits	Logic Circuits	Logic Circuits	Logic Circuits	2			2						O (elective requireed)	O (elective requireed)	O (elective requireed)	O (elective requireed)	
Fundamentals of Programming	Fundamentals of Programming	Fundamentals of Programming	Fundamentals of Programming	2			2						O (elective requireed)	O (elective requireed)	O (elective requireed)	O (elective requireed)	

[A]	[B]	[C]	[D]		Numbe		-			ute long cl ble below)	-	veek) is	Current Cou	rse Availabili	ty by Your En	rollment Year	
Carriculum for Carriculum for Students Enrolled Students Enrolled		Carriculum for Students Enrolled	Carriculum for Students Enrolled	Number of credits	First year		Second year		Third year		Fourt	h year		X: not a	ailable available ally available e section)		Note
in Fall 2010/ 2011		in Fall 2014/ 2015/ 2016		Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.	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		
Mathematical Foundations of Computer Science	-	-	-	2			2						O (elective requireed)	*	*	*	* For students emrolled 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.
Ŭ	· ·	Algorithms and Data Structures	Algorithms and Data Structures	2				2					O (elective requireed)	O (elective requireed)	O (elective requireed)	O (elective requireed)	
Computer Systems	Computer Systems	Computer Systems	Computer Systems	2				2					O (elective requireed)	O (elective requireed)	O (elective requireed)	O (elective requireed)	
Signal Processing	Signal Processing	Signal Processing	Signal Processing	2					2	2			O (elective requireed)	O (elective requireed)	O (elective requireed)	O (elective requireed)	
•		Computer Science and Engineering Laboratory	Computer Science and Engineering Laboratory	2					4 -2				O (elective requireed)	O (elective requireed)	O (elective requireed)	O (elective requireed)	* number of class hours per week changed from fall 2012.
		Information Network Systems	Information Network Systems	2					2	2			O (elective requireed)	O (elective requireed)	O (elective requireed)	O (elective requireed)	
Research Project A	Research Project A	Research Project A	Research Project A	2					2	2			O (elective requireed)	O (elective requireed)	O (elective requireed)	O (elective requireed)	
Operating Systems	Operating Systems	Operating Systems	Operating Systems	2						2			O (elective requireed)	O (elective requireed)	O (elective requireed)	O (elective requireed)	
Security > Information	Security > Information	Information Security > Information Security Basics	Information Security > Information Security Basics	2						2			O (elective requireed)	O (elective requireed)	O (elective requireed)	O (elective requireed)	* course name changed from spring 2014.
Research Project D		·		2								2	O (elective requireed)	O (elective requireed)	O (elective requireed)	O (elective requireed)	

[A]	[B]	[C]	[D]		Numbe					ute long cl ole below)		veek) is	Current Cour	rse Availabilit	y by Your En	rollment Year	
Carriculum for Students Enrolled in Fall 2010/ 2011 Carriculum for Students Enrolled in Fall 2012		Carriculum for	Carriculum for Students Enrolled	Number of credits	First year		Second year		Third year		Fourth year			X: not a	ailable available ally available e section)		Note
	Students Enrolled in Fall 2013	in Fall 2014/ 2015/ 2016		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		
Electrodynamics	Electrodynamics	Electrodynamics	Electrodynamics	2				2		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.
Electronic Circuits	Electronic Circuits	Electronic Circuits	Electronic Circuits	2					2				O (elective)	O (elective)	O (elective)	O (elective)	
Communication Systems	Communication Systems	Communication Systems	Communication Systems	2					2				O (elective)	O (elective)	O (elective)	O (elective)	
Software Engineering	Software Engineering	Software Engineering	Software Engineering	2					2				O (elective)	O (elective)	O (elective)	O (elective)	
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	·	2						4 <del>-2</del> first- half			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.
Transmission Theory	Transmission Theory	Transmission Theory	Transmission Theory	2						2			O (elective)	O (elective)	O (elective)	O (elective)	
Wireless Communication	Wireless Communication	Wireless Communication	Wireless Communication	2						2			O (elective)	O (elective)	O (elective)	O (elective)	
Multimedia Systems	Multimedia Systems	Systems	Multimedia Systems	2						2			O (elective)	O (elective)	O (elective)	O (elective)	
Mobile Communications	Mobile Communications	Mobile Communications	Mobile Communications	2						2			O (elective)	O (elective)	O (elective)	O (elective)	
-	-	Computer Graphics and Image Processing > Image Engineering Fundamentals	Computer Graphics and Image Processing > Image Engineering Fundamentals	2					2	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.

[A]	[B]	[C]	[D]		Numbe			r week (* a 2 (hours)				veek) is	Current Cour	se Availabilit	y by Your Enr	ollment Year	
Carriculum for Students Enrolled in Fall 2010/ 2011 in Fall 2012		Carriculum for Students Enrolled	Carriculum for Students Enrolled in Fall 2014/ 2015/ 2016	Number of credits	First year		Second year		Third year		Fourth year			X: not a	ailable available ally available e section)		Note
		in Fall 2013			Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.		For students enrolled in Fall 2010/ 2011	For students enrolled in Fall 2012	enrolled in	For students enrolled in Fall 2014/ 2015/ 2016	
	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
-	-	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
-	-	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	2							2 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.
-	-	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

[A]	[B]	[C]	[D]		Numbe	er of class				ute long cl		veek) is	Current Cour	rse Availabilit	y by Your En	rollment Year	
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		Students Enrolled in Fall 2013	in Fall 2014/ 2015/ 2016		Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.	Spring sem.	Fall sem.	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	
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)	<del>O (elective)</del>	* 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	<del>O (elective)</del>	<del>O (elective)</del>	<del>O (elective)</del>	<del>O (elective)</del>	* course cancelled from spring 2017.
-	-	Distributed Embedded and Real-Time Processing	Distributed Embedded and Real-Time Processing	2							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	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 4th year
_	-	Advanced Computer	Advanced Computer	2								2	O (elective)	O (elective)	O (elective)	O (elective)	* new course is available from spring 2016; allocated to 4th year
-	-	Advanced Processor	Advanced Processor	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
-	-	-	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