

# Birla Institute of Technology, Mesra, Ranchi, Department of Architecture

## BARCH Syllabus Structure 2011

(As proposed in the departmental meeting on 7/2/13)

Revised L-T-P-C as per instruction from the office of UG studies and calculation of contact hours

<b>1<sup>st</sup> SEMESTER</b>						
Subject Code	Subject	L	T	P	Credit	remarks
<b>THEORY SUBJECTS</b>						
AR 1301	Principles of Architecture	3	0	0	3	Dept Th
AR 1303	Primary Building Materials	3	0	0	3	Dept Th
AR 1305	History of Indian Architecture.*	3	0	0	3	Dept Th
AR 1307	<i>History of Indian and Middle East Architecture**</i>					
MA 1105	Mathematics for Architects	3	0	0	3	Other Dept Th
HU 1101	Technical English [Breadth Subject – I]	3	0	0	3	BS 1
Note: Any one of Arc1305 / 1307 may be registered for [*: for students at Mesra/Patna, ** for students at RAK international centre]						
<b>SESSIONAL SUBJECTS</b>						
AR 1302	Architectural Design – I	0	0	6	4	Dept L/S
AR 1304	Descriptive Geometry	0	0	6	4	Dept L/S
CS 1302	Fundamentals of Unix and C Programming	1	0	3	3	Other dept L/S
	NCC/ NSS/ CA/GAMES	0	0	3	1	Co-Curricular/BS
<b>TOTAL CREDIT</b>					<b>27</b>	
<b>Contact hours</b>		<b>16</b>	<b>0</b>	<b>18</b>		<b>34</b>
<b>2<sup>nd</sup> SEMESTER</b>						
Subject Code	Subject	L	T	P	Credit	remarks
<b>THEORY SUBJECTS</b>						
AR 2301	Theory of Design	3	0	0	3	Dept Th
AR 2303	Secondary Building Materials	3	0	0	3	Dept Th
AR 2405	History of Architecture- Western	3	0	0	3	Dept Th
AR 2407	Statics & Strength of Materials	3	0	0	3	Other Dept Th
CH 2203	Environmental Science [Breadth Subject – II]	3	0	0	3	BS 2
<b>SESSIONAL SUBJECTS</b>						
AR 2402	Creative Workshop	0	0	3	2	Dept L/S
AR 2304	Architectural Design – II	0	0	6	4	Dept L/S
AR 2306	Building Construction – I*	0	0	6	4	Dept L/S
AR 2408	<i>Building Technology – I** (RAK CENTRE)</i>					
	NCC/ NSS/ CA/GAMES	0	0	3	1	Co-Curricular/BS
<b>TOTAL CREDIT</b>					<b>26</b>	
<b>Contact hours</b>		<b>15</b>	<b>0</b>	<b>18</b>		<b>33</b>
<b>3RD SEMESTER</b>						
Subject Code	Subject	L	T	P	Credit	remarks
<b>THEORY SUBJECTS</b>						
AR 3301	Building Science-I (Climatology)	3	0	0	3	Dept Th
AR 3303	Construction Techniques and Codes	3	0	0	3	Dept Th
AR 3305	Building Services-I (Water Supply & sanitation)	3	0	0	3	Dept Th
AR 3407	Structural Mechanics	3	0	0	3	Other Dept Th
AR 3309	Art & Culture [Breadth Subject – III]	3	0	0	3	BS 3
<b>SESSIONAL SUBJECTS</b>						
AR 3402	Architectural Design - III	0	0	6	4	Dept L/S
AR 3304	Building Construction – II*	0	0	6	4	Dept L/S
AR 3306	<i>Building Technology – II** (RAK CENTRE)</i>					
AR 3308	Computer Application in Architecture	0	0	3	2	Dept L/S
	NCC/ NSS/ CA/GAMES	0	0	3	1	Co-Curricular
<b>TOTAL CREDIT</b>					<b>26</b>	
<b>Contact hours</b>		<b>15</b>	<b>0</b>	<b>18</b>		<b>33</b>

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<b>4<sup>th</sup> SEMESTER</b>						
<b>Subject Code</b>	<b>Subject</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>	<b>remarks</b>
	<b>THEORY SUBJECTS</b>					
AR 4301	Building Services - II (Acoustics)	3	0	0	3	Dept Th
AR 4403	Contemporary Architecture	3	0	0	3	Dept Th
AR 4305	Theory of Structure	3	0	0	3	Other Dept Th
AR 4407	Surveying (Theory)	3	0	0	3	Other Dept Th
	Foreign Language* [Breadth Elective – I]	3	0	0	3	BS/BE 4
	<b>SESSIONAL SUBJECTS</b>					
AR 4302	Architectural Design - IV	0	0	6	4	Dept L/S
AR 4304	Building Construction – III*	0	0	6	4	Dept L/S
AR 4306	Building Technology –III** (RAK CENTRE)					
AR 4308	Surveying	0	0	3	2	Other Dept L/S
	NCC/ NSS/ CA/GAMES	0	0	3	1	
	<b>TOTAL CREDIT</b>				<b>26</b>	
<b>Contact hours</b>		<b>15</b>	<b>0</b>	<b>18</b>		<b>33</b>
Note: Any one of AR 4304 / 4306 may be registered [*: for students at Mesra/Patna, ** for students at RAK international centre]						
<b>5<sup>th</sup> SEMESTER</b>						
<b>Subject Code</b>	<b>Subject</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>	<b>remarks</b>
	<b>THEORY SUBJECTS</b>					
AR 5301	Building Services – III (Electrical & Lighting)	3	0	0	3	Dept Th
AR 5303	Site Planning & Landscape Architecture	3	0	0	3	Dept Th
AR5405	Concrete Structure	3	0	0	3	Other Dept Th
	Breadth Elective – II*	3	0	0	3	BS/BE 5
	<b>SESSIONAL SUBJECTS</b>					
AR 5302	Architectural Design - V	0	0	9	6	Dept L/S
AR 5304	Working Drawing-I	0	0	6	4	Dept L/S
AR 5306	Landscape Design	0	0	3	2	Dept L/S
AR5308	Structural Design (R.C.C)	0	0	3	2	Other Dept L/S
	<b>TOTAL CREDIT</b>				<b>26</b>	
<b>Contact hours</b>		<b>12</b>	<b>0</b>	<b>21</b>		<b>33</b>
<b>6<sup>th</sup> SEMESTER</b>						
<b>Subject Code</b>	<b>Subject</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>	<b>remarks</b>
	<b>THEORY SUBJECTS</b>					
AR 6301	Building Services-IV (Mechanical Services)	3	0	0	3	Dept Th
AR 6303 AR 6405 AR 6407	Depth Elective I* Pre-fabrication & Modular Co-ordination #;or Vernacular Architecture#; or Vernacular Architecture in India & Arab## Note - # for students at Mesra/Patna, ## for students at RAK international centre	3	0	0	3	Dept Th [E1]
AR 6309	Steel Structures	3	0	0	3	Other Dept Th
	Breadth Elective –III**	3	0	0	3	BS/BE 6
	<b>SESSIONAL SUBJECTS</b>					
AR 6302	Architectural Design - VI	0	0	9	6	Dept L/S
AR 6304	Working Drawing II	0	0	3	2	Dept L/S
AR 6406	Specification ,Estimation and Costing	0	0	3	2	Dept L/S
AR 6308	Structural Design (Steel)	0	0	3	2	Other Dept L/S
	<b>TOTAL CREDIT</b>				<b>24</b>	
<b>Contact hours</b>		<b>12</b>	<b>0</b>	<b>18</b>		<b>30</b>

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<b>7<sup>th</sup> SEMESTER</b>						
<b>Subject Code</b>	<b>Subject</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>	<b>remarks</b>
	<b>THEORY SUBJECTS</b>					
AR 7301	Structural Concepts in Architecture	3	0	0	3	Dept Th
AR 7303	Housing and Settlement System	3	0	0	3	Dept Th
AR 7305	Building Science-II (Energy Efficient Architecture)	3	0	0	3	Dept Th
	Free Elective I* MUP2101 Urban Ecology & Environment Planning	3	0	0	3	Other Dept/Masters Th [E2]
AR3309	Breadth Elective –IV** Art & Culture (OFFERED BY DEPT)	3	0	0	3	BS/BE 7
	<b>SESSIONAL SUBJECTS</b>					
Arc 7302	Architectural Design - VII	0	0	9	6	Dept L/S
AR 7304	Interior Design	0	0	3	2	Dept L/S
	<b>TOTAL CREDIT</b>				<b>23</b>	
<b>Contact hours</b>		<b>15</b>	<b>0</b>	<b>12</b>		<b>27</b>
<b>8<sup>th</sup> SEMESTER</b>						
<b>Subject Code</b>	<b>Subject</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>	<b>remarks</b>
	<b>THEORY SUBJECTS</b>					
AR 8401	Principles of Human Settlements & Urban Design	3	0	0	3	Dept Th
AR 8303 AR 8305 AR 8307	<b>Depth Elective II*#1</b> Conservation And Heritage Management Advanced Landscaping Disaster Management	3	0	0	3	Dept Elective
AR 8309	Industrial Architecture#2					
#1 for BIT Mesra/Patna, #2 for BIT, RAK.						
MUP 3109	<b>Free Elective II*</b> City & Metropolitan Planning	3	0	0	3	Other Dept/Masters Th [E3]
	<b>Breadth Elective –V**</b>	3	0	0	3	BS/BE 8
	<b>SESSIONAL SUBJECTS</b>					
AR 8302	Architectural Design - VIII	0	0	9	6	Dept L/S
AR 8304	Introduction to Thesis Project & Research Methodology	0	0	3	4	Dept L/S
	<b>TOTAL CREDIT</b>				<b>20</b>	
<b>Contact hours</b>		<b>12</b>	<b>0</b>	<b>12</b>		<b>24</b>
<b>9<sup>th</sup> SEMESTER</b>						
<b>Subject Code</b>	<b>Subject</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>	<b>remarks</b>
	<b>THEORY SUBJECTS</b>					
AR 9301	Professional Practice and Tendering Process	3	0	0	3	Dept Th
	<b>Breadth Elective –VI**</b>	3	0	0	3	BS/BE 9
	<b>SESSIONAL SUBJECTS</b>					
AR 9302	Thesis Project	0	0	15	10	Dept L/S
<b>Contact hours</b>		<b>6</b>	<b>0</b>	<b>15</b>		<b>21</b>
	<b>TOTAL CREDIT</b>				<b>16</b>	

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10 <sup>th</sup> SEMESTER						
Subject Code	Subject	L	T	P	Credit	remarks
	<b>SESSIONAL SUBJECTS</b>					
AR 10302	Architectural Apprenticeship	0	0	0	3	Office Training
AR 10304	Field Studies	0	0	0	6	Office Training
AR 10306	Comprehensive Viva & Time Test	0	0	3	3	
	<b>TOTAL CREDIT</b>				<b>12</b>	
<b>Contact hours</b>						<b>3</b>

**TOTAL CREDITS: 226**

**Total contact hours: 271**