

SEMESTER-VI														
S.No.	CODE	SUBJECTS	L	TS	PS	CREDITS (L+0.5TS+1.5PS)	MSE		ESE		TA	MAR KS	Course Category	Total Periods
							Theo ry	Viva	Theo ry	Viva				
1	ARPC3211	Architectural Design-VI	3	3	1	6	30	20	0	50	100	200	Professional Core (PC)	7
2	ARPC3212	Town Planning	3	0	0	3	30	0	50	0	20	100	Professional Core (PC)	3
3	ARPC3213	Estimation, Costing & Valuation	3	0	0	3	30	0	50	0	20	100	Professional Core (PC)	3
4	AREP3211	Building Materials & Construction Techniques-VI	2	1	1	4	30	20	50	40	60	200	Essential Program Requirements (EPR)	4
5	AREP3212	Design of Steel Structures	3	0	0	3	30	0	50	0	20	100	Essential Program Requirements (EPR)	3
6	AROE3211	Open Elective-I/Online Course/MOOC	3	0	0	3	30	0	50	0	20	100	Open Elective (OE)	3
7	ARPE3221	Interior Design	0	2	0	1	0	20	0	40	40	100	Essential Program Requirements (EPR)	2
8	ARPC3221	Advanced Working Drawing	0	2	0	1	0	20	0	40	40	100	Professional Core (PC)	2
Total			17	8	2	24						1000		27



DEPARTMENT OF ARCHITECTURE
NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

G. E. Road, Raipur, 492010 C. G

राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर,

जी. ई. रोड, रायपुर, 492010 छ.ग.

Phone: (0771) 2255475, Fax: (0771) 2254600, Website: www.nitr.ac.in

B.Arch. Syllabus
Semester - VI

1.	Department proposing the course	Architecture
2.	Course Title	Architectural Design-VI
3.	L-T-P Structure	3-3-1
4.	Credits/# of period	6/7
5.	Course number (Code)	ARPC3211
6.	Status (Core/Essential/Elective)	Professional Core (PC)
7.	Pre-requisites (course no./title)	Architectural Design-V
8.	Frequency of offer	Annual
9.	Course Objectives (CO): 1. To incorporate the building byelaws and codes of practices in Architectural Design. 2. To incorporate necessary building services such as firefighting, HVAC and other specialized services in architectural design.	
10.	Course Syllabus: All courses learnt in this semester and in all previous semesters are subservient to Architectural Design-VI course. The course shall initiate with an Educational Tour accompanied by 1 teacher per 20 students (approx.) for understanding the application of building byelaws and codes of practices for varied building types and scale in different cities. The lessons learnt from educational tour shall be submitted in form of Tour Report and learning shall be implemented in further design problems. The students shall be encouraged to design the building incorporating all necessary building byelaws and to understand its influence on the building design. The suggestive design topics may include multiple spaces viz. gated community, railway station, bus terminus, factory design, institute building, polytechnic, students activity center, gymkhana, motel, super-specialty hospital, 5-star hotel, etc. <i>The deliverables shall be in the form of Portfolio/Sheets/Models/Reports/Multi-Media Presentation, etc.</i>	
11.	References: - i. GoI. (2016). <i>National Building Code (NBC)</i> . ii. Neufert, E., Neufert, P., & Kister, J. (2012). <i>Architects' Data</i> . John Wiley & Sons. iii. Russ, T. H. (2009). <i>Site Planning and Design Handbook</i> . New York: McGraw-Hill.	



DEPARTMENT OF ARCHITECTURE
NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

G. E. Road, Raipur, 492010 C. G

राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर,

जी. ई. रोड, रायपुर, 492010 छ.ग.

Phone: (0771) 2255475, Fax: (0771) 2254600, Website: www.nitr.ac.in

B.Arch. Syllabus
Semester - VI

1.	Department proposing the course	Architecture
2.	Course Title	Town Planning
3.	L-T-P Structure	3-0-0
4.	Credits/# of period	3/3
5.	Course number (Code)	ARPC3212
6.	Status (Core/Essential/Elective)	Professional Core (PC)
7.	Pre-requisites (course no./title)	NIL
8.	Frequency of offer	Annual
9.	Course Objectives (CO): 1. To provide elementary knowledge of Town Planning and basic Planning Techniques. 2. To make students familiar of process of city evolution, concepts related to identifying and solving various issues related to cities.	
10.	Course Syllabus: Unit-1: Introduction a. Introduction to Town Planning. b. Evolution of Town Planning. c. Relationship of Town Planning with other allied fields such as Urban Design, Conservation, Housing, Environmental Planning, etc. d. Planning Typologies and Elements of Planning (such as Landuse, Character, Densities, etc.). Unit-2: Planning Techniques and Theories a. Planning Approaches. b. Zoning and Zoning Regulations. c. Theories of planning like Land-use Theory, Exploratory Theories, Speculative Theories, etc. d. Legal Aspects of Planning - Police Power, Eminent Domain, Development Controls, Urban Local Bodies, Acts, etc. Unit-3: Surveys in Town Planning a. Socio-Economic and Land-use Survey. b. Density and Infrastructure Survey. c. Survey Techniques. d. Sample Selection Methods. Unit-4: Types of Plans and Plan Preparation a. Types of Plans like Perspective Plan, Regional Plan, Development Plan, Action Area Plan, etc. b. Planning Process for preparing Development (Master) Plans. c. Planning of New Towns and Industrial Towns. d. Internal Structures of Towns, Inner City Development. Unit-5: Open Area and Transportation Planning a. Hierarchy of Open Spaces and Social Forestry. b. Introduction to Transportation Planning and TOD. c. Road Network, Hierarchy of Roads, Intersections, Interchanges, Rotary and Road Design, etc. d. Transportation Survey and Analyses. <i>The assignments may be in form of sketches, term-papers, reports, drawings, presentations, etc.</i>	
11.	References: - i. Bandyopadhyay A., <i>Textbook of Town Planning</i> , Kolkata, India, 2010. ii. Eisner, S., Gallion, A., & Eisner, S. (1993). <i>The urban pattern</i> . John Wiley & Sons. iii. Ramachandran, R. (1992). <i>Urbanization and urban systems in India</i> . OUP Catalogue. iv. Rao, M. P. (2001). <i>Urban Planning: Theory & Practice</i> . CBS Publishers & Distributors.	



DEPARTMENT OF ARCHITECTURE
NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

G. E. Road, Raipur, 492010 C. G

राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर,

जी. ई. रोड, रायपुर, 492010 छ.ग.

Phone: (0771) 2255475, Fax: (0771) 2254600, Website: www.nitr.ac.in

B.Arch. Syllabus
Semester - VI

1.	Department proposing the course	Architecture
2.	Course Title	Estimation, Costing and Valuation
3.	L-T-P Structure	3-0-0
4.	Credits/# of period	3/3
5.	Course number (Code)	ARPC3213
6.	Status (Core/Essential/Elective)	Professional Core (PC)
7.	Pre-requisites (course no./title)	NIL
8.	Frequency of offer	Annual
9.	Course Objectives (CO): 1. To understand the importance of cost in the project. 2. To learn the technical language of writing an estimate.	
10.	Course Syllabus: Unit-1: Specifications a. Definition, importance, and types. b. Use of Indian standard specification handbooks like PWD, CPWD, etc. c. Methods of specification writing and its influence on cost. d. Writing Standard clauses and instructions. Unit-2: Estimation a. Terminologies and types. b. Methods of Estimation. c. Calculations for basic building materials like Concrete works, Brick works, Earthworks, etc. d. Quantity Surveying for various items. Unit-3: Rate Analysis and Costing a. Introduction to Schedule of Rates and Market Rates. b. Rate analysis, overhead costs, cost of materials and labor for various items of work, measurement of work for interim and final certificates for payment to contractors. c. Preparing BOQs. Unit-4: Reports and Tenders a. Estimation Reports. b. Administrative Approval, Expenditure Sanction, Technical sanction, Competent authority, etc. c. Issue rates, Payment on accounts, Suspense account, Security Deposit, Earnest Money Deposit, Performance Guarantee, Muster Roll, Measurement Book, etc. Unit-5: Valuation a. Terminologies and Types. b. Gross income, Net income, Depreciation Value, Capitalized value, Scrap Value, Salvage value, etc. c. Methods of Valuation and Valuation Reports. d. Rent Fixation, Mortgage, Lease, etc. <i>The assignments may be in form of sketches, term-papers, reports, drawings, presentations, etc.</i>	
11.	References: - i. Chakraborti, M. (1987). <i>Estimating, Costing and Specification in Civil Engineering</i> . ii. Dutta, B. N., & Dutta, S. (1991). <i>Estimating and Costing in Civil Engineering: Theory and Practice: including Specifications and Valuation</i> . UBS. iii. Rangwala, C. (2015). <i>Estimating, Costing and Valuation</i> . iv. Singh, G. (2002). <i>Estimating Costing and Valuation</i> . Delhi: Standard Distributors.	



DEPARTMENT OF ARCHITECTURE
NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

G. E. Road, Raipur, 492010 C. G

राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर,

जी. ई. रोड, रायपुर, 492010 छ.ग.

Phone: (0771) 2255475, Fax: (0771) 2254600, Website: www.nitr.ac.in

B.Arch. Syllabus
Semester - VI

1.	Department proposing the course	Architecture
2.	Course Title	Building Materials and Construction Techniques-VI
3.	L-T-P Structure	2-1-1
4.	Credits/# of period	4/4
5.	Course number (Code)	AREP3211
6.	Status (Core/Essential/Elective)	Essential Program Requirements (EPR)
7.	Pre-requisites (course no./title)	AREP3111-Building Materials and Construction Techniques-V
8.	Frequency of offer	Annual
9.	Course Objectives (CO):	1. To understand Prefabricated and Pre-engineered construction. 2. To study various building components like openings and canopies.
10.	Course Syllabus:	Unit-1: Prefabricated construction- Concrete a. Precast (slab, columns, wall panels, etc.). b. Pre-stressed (slabs, beams, columns, waffles, etc.). c. On-site and off-site prefabrication. Unit-2: Prefabricated construction- Steel and Pre-engineered construction a. Steel Components: Bracings, Purlins and Eaves, Sheeting and Cladding Materials. b. Ventilators, Skylights, Louvers, Doors, Windows, Roof Curbs, Fasteners, etc. c. Pre-engineered construction like sandwiched panels, etc. Unit-3: Special Openings a. Rolling shutter. b. Collapsible gate. c. Fencing, wicket gate, railings, grills. Unit-4: Canopies a. Designing of Porch, Canopies in RCC and steel (including tubular). b. Designing of Covered ways in steel and RCC. c. Fixing details of lighting fixtures, rainwater drainage systems, etc. in canopy. Unit-5: Miscellaneous a. Introduction to Composite construction. b. Expansion joints, Water proofing including basement water proofing. c. Pile foundations, shallow foundations. d. Defects in buildings. <i>The assignments may be in form of sketches, term-papers, reports, drawings, presentations, etc.</i>
11.	References: -	i. Barry, R. (1999). <i>The Construction of Buildings Vol. 2. 5th Ed.</i> New Delhi: East-West Press. ii. Foster, J. and Mitchell, S. (1963). <i>Building Construction: Elementary and Advanced, 17th Ed.</i> London: B.T. Batsford Ltd. iii. Kumar, S. (2003). <i>Building Construction. 19th Ed.</i> Delhi: Standard Publishers. iv. McKay, W. B. (2005). <i>Building Construction Metric Vol. I-IV. 4th Ed.</i> Mumbai: Orient Longman. v. Moxley, R. (1961). <i>Mitchell's Elementary Building Construction.</i> London: B. T. Batsford. vi. Rangwala, S. C. (2019). <i>Building Construction 33rd Ed.</i> Anand: Charotar Publishing House Pvt. Ltd.



DEPARTMENT OF ARCHITECTURE
NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

G. E. Road, Raipur, 492010 C. G

राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर,

जी. ई. रोड, रायपुर, 492010 छ.ग.

Phone: (0771) 2255475, Fax: (0771) 2254600, Website: www.nitr.ac.in

B.Arch. Syllabus
Semester - VI

1.	Department proposing the course	Architecture
2.	Course Title	Design of Steel Structures
3.	L-T-P Structure	3-0-0
4.	Credits/# of period	3/3
5.	Course number (Code)	AREP3212
6.	Status (Core/Essential/Elective)	Essential Program Requirements (EPR)
7.	Pre-requisites (course no./title)	NIL
8.	Frequency of offer	Annual
9.	Course Objectives (CO): 1. To introduce the fundamentals of Steel Structures design. 2. To understand the behavior and application of steel structures.	
10.	Course Syllabus: Unit - 1: Introduction a. Indian Standard Rolled Steel Sections. b. I.S. code specifications. c. Working Stress Method. d. Limit State Method. Unit - 2: Steel Connections a. Riveted Connections. b. Bolted and Pin Connections. c. Welded Connections. d. Eccentric and Moment Resistant Connections. Unit - 3: Design of Compression Member and Tension member a. Axially and Eccentrically Loaded Column. b. Lacing and Battered Column. c. Column Splice. d. Net Sectional Area. e. Tension Splices and Lug Angle. Unit - 4: Design of Flexural Member and Footing a. Laterally Supported Beams. b. Laterally Unsupported Beams. c. Built-up Beams. d. Footing for Column Base. Unit - 5: Introduction to Special Steel Structures a. Roof Trusses b. Tubular Structure. c. Portal Frames. d. Light Gauge Structures, etc. <i>The assignments may be in form of sketches, term-papers, reports, drawings, presentations, etc.</i>	
11.	References: - i. Duggal, S. K. (2000). Design of steel structures. Tata McGraw-Hill Education. ii. Negi, L. S. (1997). Design of steel structures. Tata McGraw-Hill Education. iii. Punmia, B. C., Jain, A. K., & Jain, A. K. (1998). Comprehensive design of steel structures. Firewall Media. iv. Raju, N. K. (2005). Advanced reinforced concrete design. CBS Publishers & Distributors Pvt Limited. v. Ramchandra, S., & Gehlot, V. (2007). Design of Steel Structures Vol. II. Standard Book House. vi. Standard, B. I. (2007). General construction in steel-code of practice. 3rd Revision, Bureau of Indian Standard, New Delhi, India,	



DEPARTMENT OF ARCHITECTURE NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

G. E. Road, Raipur, 492010 C. G

राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर,

जी. ई. रोड, रायपुर, 492010 छ.ग.

Phone: (0771) 2255475, Fax: (0771) 2254600, Website: www.nitr.ac.in

B.Arch. Syllabus Semester - VI

1.	Department proposing the course	Architecture
2.	Course Title	Earthquake Resistant Architecture
3.	L-T-P Structure	3-0-0
4.	Credits/# of period	3/3
5.	Course number (Code)	AROE3211-1
6.	Status (Core/Essential/Elective)	Open Elective (OE)-I
7.	Pre-requisites (course no./title)	NIL
8.	Frequency of offer	Annual
9.	Course Objectives (CO): 1. To acquaint the students with the knowledge of Earthquake Resistant Building Techniques. 2. To impart knowledge of the best practices in Earthquake Resistant Architectural Design.	
10.	Course Syllabus: Unit-1: Earthquake Basics a. Introduction to earthquakes, plate tectonics, faults, consequences of earthquake. b. Earthquake parameters, magnitude & intensity, scales. c. Seismic zones of India, damages caused during past earthquakes and lessons learnt. Unit-2: Fundamentals of Earthquake Vibrations of Buildings a. Static load and Dynamic load (force control and displacement control), natural frequency, resonance, and increased response. b. Responses of buildings to different types of vibrations like free and forced, damped and undamped vibration. c. Response of building to earthquake ground motion, soil liquefaction. Unit-3: Design Philosophy a. Philosophy of earthquake resistant design, Virtues of earthquake resistant structures (strength, stiffness, ductility, and configuration). b. Architectural considerations in earthquake resistant planning and design of buildings (configuration characteristics and their effects, plan, and vertical configuration problems). c. Seismic Micro-zonation and Architectural Planning, Base Isolation for reduction of Earthquake hazard in Multistoried Buildings. Unit-4: Earthquake Resistant Masonry Buildings a. Un-reinforced Masonry, Basics of masonry, units of masonry, good construction practices. b. Earthquake resistant features- bands and vertical reinforcement. Unit-5: Earthquake Proof Construction and Architecture a. Making buildings resilient to earthquakes, Earthquake proof and earthquake resistant design, seismic structural configuration. b. Building codes and regulations for earthquake prone areas. c. Retrofitting, Repair and seismic strengthening of masonry and concrete buildings. <i>The assignments may be in form of sketches, term-papers, reports, drawings, presentations, etc.</i>	
11.	References: - i. Agrawal, P., & Shrikhande, M. (2006). <i>Earthquake resistant design of structures</i> . PHI Learning Pvt. Ltd. ii. Chopra, A. K. (2007). <i>Dynamics of structures</i> . Pearson Education India. iii. Duggal, S. K.; <i>Earthquake resistance design of structures</i> ; Oxford University Press, New Delhi. iv. GoI. (1993). <i>Code of Practice for Ductile Detailing of RC Structures</i> - IS: 13920. New Delhi. v. GoI. (1993). <i>Code of Practice for earthquake resistant design & Construction of buildings</i> - IS 4326. New Delhi. vi. GoI. (2002). <i>Criteria for earthquake resistant design General provision & Building</i> - IS: 1893. New Delhi. vii. IITK-GSDMA EQ26 V -3.0 Design Example of a Six Storey Building	



DEPARTMENT OF ARCHITECTURE
NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

G. E. Road, Raipur, 492010 C. G

राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर,

जी. ई. रोड, रायपुर, 492010 छ.ग.

Phone: (0771) 2255475, Fax: (0771) 2254600, Website: www.nitr.ac.in

B.Arch. Syllabus
Semester - VI

1.	Department proposing the course	Architecture
2.	Course Title	Universal Design
3.	L-T-P Structure	3-0-0
4.	Credits/# of period	3/3
5.	Course number (Code)	AROE3211-2
6.	Status (Core/Essential/Elective)	Open Elective (OE)-I
7.	Pre-requisites (course no./title)	NIL
8.	Frequency of offer	Annual
9.	Course Objectives (CO): 1. To acquaint the students to the types of impairments and the need to design for everyone. 2. To make students understand various standards, codes, and guidelines of Universal Design. 3. To understand the process of designing the elements and services within and outside a building with respect to the impairments.	
10.	Course Syllabus: Unit-1: Introduction a. Barrier Free and Universal Design. b. Goals of Universal Design. c. Types of Impairments and Needs of Specially Abled. d. Norms, Codes and Guidelines of Universal Design. Unit-2: Standards for Universal Design a. Mobility Devices (such as wheelchair, white canes, etc.). b. Circulation Dimensions. c. Height and Cone of vision. d. Lighting and Illumination Levels. Unit-3: Signages and Textures a. Signages and Symbols. b. Special Surface Textures and Levels. c. Guiding and Warning Methods. d. Alarm Systems, etc. Unit-4: Universal Accessibility a. Ramp, Staircases, Lifts, Escalators. b. Vehicular Areas, Parking, Curb Ramps. c. Corridor, Lobby, Pathway, Emergency Exit. d. General Design considerations, Maneuvering Space, etc. Unit-5: Universal Design Elements and Services a. Doors, Windows, Entrances. b. Wash Area, Toilets, Shower Cubicles, Drinking Water Fountains, Kitchens, etc. c. Indoor and Outdoor Furnitures. d. Best Practices in Universal Design. <i>The assignments may be in form of sketches, term-papers, reports, drawings, presentations, etc.</i>	
11.	References: - i. CPWD. (2014), <i>Handbook on Barrier Free and Accessibility</i> , MoUD, GoI, New Delhi. ii. CPWD. (2016), <i>Space Standards for barrier-free built environment</i> , MoUD, GoI, New Delhi. iii. GoI. (2016), <i>National Building Code, India</i> . New Delhi. iv. GoI. (2016), <i>Rights of persons with disabilities</i> , New Delhi.	



DEPARTMENT OF ARCHITECTURE
NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

G. E. Road, Raipur, 492010 C. G

राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर,

जी. ई. रोड, रायपुर, 492010 छ.ग.

Phone: (0771) 2255475, Fax: (0771) 2254600, Website: www.nitr.ac.in

B.Arch. Syllabus
Semester - VI

1.	Department proposing the course	Architecture
2.	Course Title	Disaster Management and Mitigation Systems
3.	L-T-P Structure	3-0-0
4.	Credits/# of period	3/3
5.	Course number (Code)	AROE3211-3
6.	Status (Core/Essential/Elective)	Open Elective (OE)-I
7.	Pre-requisites (course no./title)	NIL
8.	Frequency of offer	Annual
9.	Course Objectives (CO): 1. To prepare and equip the students in disaster preparedness, mitigation, and management. 2. To develop the skills for building disaster resistant buildings.	
10.	Course Syllabus: Unit-1: Introduction: a. Definition of disaster, hazard, risk, and vulnerability. b. Types of disaster, indicators, and related definitions. c. Disaster profile of India. Unit-2: Understanding Disaster Management a. Disaster management in phases (pre, during and post). b. Concerned authorities and stakeholders of the disaster management process. c. Preparedness and mitigation measures for various disasters. d. Post disaster relief & logistics management. Unit-3: Disaster Management Plans a. Disaster mapping and identifying the hazards and vulnerabilities. b. Introduction to various disaster management plans laid down by concerned ministries/departments/organizations. c. Predictions, early warnings and safety measures of disaster, role of information technology, education, communication, and training, role of government, etc. Unit-4: Disaster Management (pre disaster) a. Building safety standards for hazards. b. Design aspects and considerations for various types of buildings. c. Disaster resistant construction and their case studies. Unit-5: Disaster Management (post disaster) a. Damage Assessment. b. Transitional Shelters and Fast Construction Techniques. c. Rehabilitation, Reconstruction and Recovery. <i>The assignments may be in form of sketches, term-papers, reports, drawings, presentations, etc.</i>	
11.	References: - i. Bhandari, R. K. (2006). <i>Disaster Management in India: A New Awakening</i> . Disaster and Development, 1(1), 1-26. ii. Collins, L. R. (2000). <i>Disaster management and preparedness</i> . CRC Press. iii. Davis, I. (1978). <i>Shelter after disaster</i> . In <i>Shelter after disaster</i> (pp. 127-127). iv. Goel, S. L. (2006). <i>Encyclopedia of Disaster Management</i> . Decept & Deep Publications. v. Government of India, (2004), 'Disaster Management in India' – A Status Report, Ministry of Home Affairs (Disaster Management Division), New Delhi vi. Pinkowski, J. (Ed.). (2008). <i>Disaster management handbook</i> . CRC press. vii. Sengupta, A. K. (2006). <i>Development of a Handbook on Seismic Retrofit of Buildings in India</i> . viii. Zebrowski, E., & McGuire, B. (1997). <i>Perils of a Restless Planet: Scientific Perspectives on Natural Disasters</i> . Nature, 389(6654), 926-926.	



DEPARTMENT OF ARCHITECTURE
NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

G. E. Road, Raipur, 492010 C. G

राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर,

जी. ई. रोड, रायपुर, 492010 छ.ग.

Phone: (0771) 2255475, Fax: (0771) 2254600, Website: www.nitr.ac.in

B.Arch. Syllabus
Semester - VI

1.	Department proposing the course	Architecture
2.	Course Title	Interior Design
3.	L-T-P Structure	0-2-0
4.	Credits/# of period	1/2
5.	Course number (Code)	ARPE3221
6.	Status (Core/Essential/Elective)	Essential Program Requirements (EPR)
7.	Pre-requisites (course no./title)	NIL
8.	Frequency of offer	Annual
9.	Course Objectives (CO): 1. To develop a holistic approach towards design by considering internal space utilization. 2. To learn the impact of visual experience.	
10.	Course Syllabus: The course aims to create an understanding among students about the role of interior design in total design process, procedure involved in the designing process, and impact of the interior space on human psychology and behavior. The students will learn about the components of interior design such as space, planes, form, color, texture, abstract and formal configuration, geometrical disciplines, visual controls, illusions with their separate and combined impact, use of materials, colors, styles, orientation, privacy, grouping, flexibility, circulation, furniture arrangements, etc. It is also intended to familiarize the students with different materials used in interiors elements such as surfaces viz. walls, floor, ceilings etc., furniture-loose and built in, upholstery, drapery, rugs, carpets, and other floor coverings, water bodies, planters, and plantation, lighting and lighting fixtures, decorative features like paintings, sculptures, etc. Emphasis shall be given on the services used in interiors viz. electrical wiring system, acoustical treatment, etc. The suggestive design topics may include interiors for spaces having different uses and requirements such as Reception halls, Waiting Lounges, Restaurants, Foyers, Drawing Halls, Offices, Residential Spaces, Exhibition Halls, Hotels, Theatres, Assembly Halls etc. <i>The deliverables shall be in the form of Portfolio/Sheets/Models/Reports/Multi-Media Presentation, etc.</i>	
11.	References: - i. Francis D.K.Ching, <i>Interior Design Illustrated</i> , V.N.R. Pub. NY 1987. ii. John F.Pile, <i>Interior Design</i> , John Wiley and Sons 2004. iii. Joseph DeChiara, Julius Pancro, Martin Zelnik. <i>Time Saver's Standards for Interior Design</i> , McGraw-Hill Professional 2001. iv. Kasu, A. A. (2005). <i>An introduction to art, craft, technique, science & profession of interior design</i> . Bombay: Equara Publications.	



DEPARTMENT OF ARCHITECTURE
NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

G. E. Road, Raipur, 492010 C. G

राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर,

जी. ई. रोड, रायपुर, 492010 छ.ग.

Phone: (0771) 2255475, Fax: (0771) 2254600, Website: www.nitr.ac.in

B.Arch. Syllabus
Semester - VI

1.	Department proposing the course	Architecture
2.	Course Title	Advanced Working Drawing
3.	L-T-P Structure	0-2-0
4.	Credits/# of period	1/2
5.	Course number (Code)	ARPC3221
6.	Status (Core/Essential/Elective)	Professional Core (PC)
7.	Pre-requisites (course no./title)	NIL
8.	Frequency of offer	Annual
9.	Course Objectives (CO): 1. To learn preparation for detailed working drawings with respect to services. 2. To accustom students with the required coordination between architectural, civil, and other technical drawings.	
10.	Course Syllabus: Any medium scale Architectural Design project such as Hostel, Community Centre, Primary School, Multi-level Car Parking etc. shall be taken up for the preparation of their Good for Construction (GFC) drawings. The focus shall be on architectural drawings and service layouts. The drawings to be prepared for any of the above project shall be as mentioned below: The Architectural drawings may include drawings for Architectural Floor plans, Site plans, Terrace Plans, etc. The drawings for various services at building as well as site level shall be prepared. The building services may include water supply, sanitation, storm water management, electrical, firefighting, HVAC, etc. <i>The deliverables shall be in the form of Portfolio comprising of all the drawings prepared in the semester.</i>	
11.	References: - i. Joe, B. (Ed). (2002). <i>Details in Architecture: Vol. I-V</i> . Victoria: The Images Publishing group. ii. Styles K. (2014). <i>Working Drawings Handbook</i> , RIBA (Part 1). iii. Weston, R. (2004). <i>Plans Sections Elevations – Key buildings of the twentieth century</i> . London: Laurence King Publishing.	