Annexure II
Details of desired specializations required for Associate Professors, NIT Raipur

S.No.	Name of the Department	Desired Specialization
1	Architecture	Architecture - Architecture, Urban design, Sustainable architecture, Landscape Architecture, Architectural Conservation. Planning - Housing, Transportation Planning, Urban Planning, City Planning, Town planning, Environmental Planning, Regional Planning. Others - Construction management, Building Engineering Management, Building Science and Technology, Building Economy and Real Estate or any other related field.
2	Bio medical Engineering	Biomedical Device Design, Bioelectronics, Biomedical Instrumentation, Biosensors, experimental Brain computer interface, telemedicine, rehabilitation engineering. Note: One of the essential degrees as mentioned in point no. 5(Common Essential educational requirements) should be in Bio-Medical Engineering.
3	Civil	Environmental Engineering, Transportation Engineering, Geotechnical Engineering and Structural Engineering
4	Computer Science and Engineering	**Specializations:** Artificial Intelligence, Machine Learning, Database, Distributed Systems, Security and Privacy, Cloud Computing, Human-Computer Interaction, Data Science, Natural Language processing, Blockchain Technologies **Essential Qualification:** B.Tech./B.E. or any other equivalent degree in Computer Science and Engineering/ Information Technology **AND** M.Tech./ME/MS or any equivalent degree in Computer Science and Engineering/ Information Technology/ any relevant discipline **AND** Ph.D. in relevant discipline
5	HSS	English Literature, American Literature, Indian Writings in English Literature
6	Information technology	Theoretical Computer Science, Data Science, Cyber Security, Computer Vision, Artificial Intelligence and Machine Learning, Natural Language Processing, Embedded System and IoT, Next Generation Networks, Natural Computing, data Modeling.
7	Metallurgical and Materials Engineering	Process Metallurgy, Transport Phenomena, Metallurgical Thermodynamics and kinetics, Non-Ferrous extractive metallurgy, Ferrous extractive metallurgy and steel technology, Computational Materials Science, Process Modeling and Simulation, Artificial Intelligence and Machine Learning in Materials Engineering, Additive Manufacturing, Electronic materials, Nanomaterials, and nanotechnology, Electrometallurgy and Corrosion, Physical and Mechanical Metallurgy