Areas of Specialization

Bioscience & Bioengineering Department	1) **Medical Instrumentation**: medical imaging in any modality; instrumentation for electrophysiology; diagnostic/monitoring instrumentation; surgical/interventional instrumentation 2) **Medical Signal & Medical Image Processing**: electrophysiological signal processing (Evoked potentials, EEG, EMG, ECG, etc.), in vivo medical image processing 3) **Physiological Systems Modelling**: cardiovascular system modelling; musculoskeletal modelling; respiratory system modelling; systems control perspective to physiological modelling 4) **Data Science for Biomedical Engineering**: digital health (AI/ML/IoT) applications at the hospital/clinical level **Additionally,** candidates must have a basic degree in engineering or physical sciences (biomedical, electrical, instrumentation, mechanical, computational, systems control; physics, math, statistics), with a research background at the human systems and/or whole organ level having closely worked in the physiological systems/clinical domain and future research plans at the human systems/whole-organ level. Research work at the sub-cellular, cellular, and tissue levels will not be considered.
Humanities & Social Sciences	1. Sociology: Economic Sociology, Anthropology, Labour/Industrial Sociology,Political Sociology. Agrarian, Rural/village studies, Sociology of religion, Digital Sociology, Quantitative Sociology, Sociology of Education and Public Health. 2. Economics: Financial Economics, International Trade and Finance,Monetary Economics and Open Economy Macroeconomics 3. English: All areas of Literature and Theoretical linguistics; Theatre and Performance studies. 4. Psychology: Social Psychology, Industrial/ Organizational Psychology, Clinical Psychology, Environmental Psychology, Computational Psychology, Cognitive Psychology, Sport Psychology, Political Psychology 5. Philosophy: Logic, Philosophy of Science 6. Sanskrit: Indian Science and Technology 7. Political Science: Political Thought, Comparative Politics and Indian Politics 8. History: History and Archaeology with a preference for specializations in Ancient and Medieval History, Numismatic and Epigraphy.
IDC School of Design	Product Design; Communication Design; Animation; Interaction Design; Mobility and Vehicle Design; Bionics and Design; System Thinking; Material Culture; Sketching and Visual Representations; Sustainable Product Design; Illustration/Drawing; Ceramics; VR/AR/New Media; Immersive Technologies; Game Design; Filmmaking; Automotive Styling and Design; Sustainable Transport; Smart Mobility; Connected Mobility; Human Powered Mobility; Mobility for Special Needs
Koita Centre for Digital Health	Healthcare/Medicine/Bio-engineering/Public Health/Health Policy/ Health Economics driven by digital/information/ communication technologies such as bioinformatics, biostatistics, medical imaging, sensors, AI/ML, IoT, and bio-signal processing.