Application Deadline: 26th September 2025 | Joining: 2026 January

Applications are invited for a PhD position to work in an Indo-Australian BITS-RMIT joint Ph.D. program under the supervision of Prof. Abhishek Sarkar (Mechanical Engineering) & Prof. Vasan Arunachalam. (Civil Engineering), BITS-Pilani Hyderabad Campus, and Prof. Alireza Bab-Hadiashar, STEM, School of Engineering, Royal Melbourne Institute of Technology (RMIT), Australia.

The work involves designing a modular climbing mechanism adaptable to varying diameters, integrating advanced actuation, intelligent control algorithms, and multi-modal sensing for defect detection and navigation. A communication and monitoring interface will enable real-time visualization and data storage. The system will be validated through simulations, prototypes, and field trials.

Project Title	**Development of an Intelligent Pipe-Climbing Robot for Pipeline Inspection**
No of Position	1
Eligibility	Bachelor/Master's degree in Mechanical/ Robotics/ Mechatronics Engineering and relevant fields. Also, go through the website [https://bitspilaniedu.com/rmit/bitsrmitphdwebsite/ProjectsResearch.aspx?bitrmite] for minimum qualification requirement.
Desirable criteria	• Applicants should have working knowledge and hands-on experience in prototyping, robotics/mechatronics, embedded systems, and machine learning, with the ability to integrate these domains towards the design, control, and intelligent operation of robotic systems.
Highlights	• Acquire an internationally recognized qualification from an Indian Institute of Eminence University and a top Australian university • BITS Pilani Ph.D. fellowship: INR 45,800/- per month for student with a higher degree of BITS Pilani or its equivalent; INR 42,800/- per month (during course work), INR 45,800/- per month (after coursework completion) for student with an integrated first degree of BITS Pilani or its equivalent • Receive a full RMIT tuition fee scholarship for the duration of your enrolment. • Benefit from the combined expertise of two leading universities and access world-class research facilities in India and in Melbourne • Travel to Australia for up to one year of candidature and be supported by an Australian stipend for the duration of your time in Melbourne
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How to Apply	Click on the Project id BITS025F001461 [https://bitspilaniedu.com/rmit/bitsrmitphdwebsite/ResearchProjectDetail.aspx?progCode=477] for a detailed description **Step1:** Click on the following link for applying: Application Portal [https://bitspilaniedu.com/rmit/bitsrmitphdwebsite/ProjectsResearch.aspx?bitrmite] **Step2**: Select the project either with the Project id or the Title **Step3:** Register and fill the online application.

Place of work: BITS Pilani, Hyderabad Campus

For any query, send an e-mail to
Prof Abhishek Sarkar [abhisheks@hyderabad.bits-pilani.ac.in] &
Prof Vasan Arunachalam [vasan@hyderabad.bits-pilani.ac.in]