

### Major Research Initiatives - IIT Palakkad

Sl. No.	Title	Description
01.	Centre for Research and Education in Data Science	<p>CREDS has the vision to provide world class education, pursue cutting edge research, and develop data science &amp; artificial intelligence for the benefit of society. While the immediate focus will be on sustainability and education, the center will also have researchers in other areas of relevance of data science. The current focus of the centre includes:</p> <p>Smart Farming: Towards a Sustainable Agricultural Framework in India                      AI based Water Management in India                      Immunizing the World against Zoonotic Pandemics using Data Science.</p> <p>CREDS is hosting a MTech program in Data Science from the academic year 2020, in addition to training MS and PhD students.</p> <p>A major agenda of CREDS is to foster active industrial as well as academic collaborations.</p>
02.	Centre for Computational Imaging	<p>The Center for Computational Imaging (CCI) at IIT Palakkad is an interdisciplinary center that is engaged in pushing the frontiers in all aspects of imaging - sensing and image acquisition, processing and visualization, and acceleration. The center aims to synergize research across several layers of the computational system to identify new opportunities for improvements.</p>
03.	MoU with Indian Air Force for 3D Metal Additive Manufacturing	<p>An MoU between IIT Palakkad and the Indian Air Force (IAF), Air Headquarters, New Delhi was signed on 18 July, 2022 at 9 Base Repair Depot, Air Force Station Pune.</p> <p>The MoU will facilitate cooperation and promotion of research and development in the areas of indigenous development of aviation components with specific aim to undertake</p>

		<p>research in 3D Metal Additive Manufacturing. Besides research in areas of mutual interest, the MoU will assist indigenization efforts of the IAF for specific studies in the area of metallurgy related to 3D Metal Additive Manufacturing and in connection to other critical projects of significance.</p>
04.	<p>Joint Research Programme with Continental India for cutting edge Automotive Technologies</p>	<p>Automotive Technology company Continental's Technical Centre India (TCI) and IIT Palakkad signed a Memorandum of Understanding for a three-year joint research programme on 7 July 2022. The MoU will facilitate an exciting collaboration between the technical expertise available at Continental and the academic and research excellence of IIT-Palakkad in the areas of autonomous driving technologies, connected mobility, and advanced safety solutions. Continental will also offer internship opportunities and co-design inputs for course offered at IIT-Palakkad, to keep students up-to-date with current and upcoming industry trends.</p>