

รายละเอียดคุณสมบัติผู้เข้าร่วมโครงการและลักษณะงาน

Optics and Photonics Centre	
Project 1	Development and test of an High resolution Spectrograph
Requirements	<ol style="list-style-type: none"> 1. Bachelor in Physics, mechanical or system engineering or similar 2. Good knowledge of geometrical optics 3. Good knowledge of physical optics 4. First experience in laboratory with optical instruments needed (Microscope, interferometer, spectrograph). 5. Strong motivation for the development of astronomical and space instruments preferred 6. Good knowledge of Matlab or Python would be an asset
Project 2	Support to Thai Space Consortium 1 Optical Payload prototype alignment and performance estimation
Requirements	<ol style="list-style-type: none"> 1. Bachelor in Physics, mechanical or system engineering or similar 2. Good knowledge of geometrical optics 3. Good knowledge of physical optics 4. First experience in laboratory with optical instruments needed (Microscope, interferometer, spectrograph). 5. Strong motivation for the development of astronomical and space instruments preferred 6. Basic knowledge of OpticStudio (Ex-ZEMAX) required

Project 3	Development of Interface between Linux and scientific instrumentation (EMCCD, Fast steering mirrors, etc.)
Requirements	<ol style="list-style-type: none"> 1. Bachelor in IT, physics or system engineering 2. Good knowledge of Linux system and architecture required. 3. Strong motivation to develop instrumentation for astronomical instrumentation required. 4. Good knowledge of Linux requested
Project 4	Raman spectrograph mechanical design and performance estimation
Requirements	<ol style="list-style-type: none"> 1. Bachelor in aerospace, mechanical or system engineering or similar 2. Good knowledge of mechanical properties of materials. 3. Good knowledge of mechanical simulations of system properties (deformation under gravity, thermo-elastic deformation) using Solidworks or similar is requested. 4. Strong motivation to design state-of-art optical systems for spectroscopy preferred. 5. Capability and motivation to establish the analytical model of mechanical systems would be an asset. 6. Good knowledge of Solidworks simulation tool is mandatory. 7. Good knowledge of Matlab or Python would be an asset.
Project 5	Ultraviolet Spectrograph for Atmospheric Research - Design, performance estimation and development
Requirements	<ol style="list-style-type: none"> 1. Bachelor in Physics, mechanical or system engineering or similar 2. Good knowledge of geometrical optics 3. Good knowledge of physical optics 4. First experience in laboratory with optical instruments needed (Microscope, interferometer, spectrograph). 5. Strong motivation for the development of astronomical and space instruments preferred 6. Good knowledge of Matlab required 7. Basic knowledge of OpticStudio (Ex-ZEMAX) required

Project 6	Development and test of a phase-lock amplifier for Fourier Transform Spectroscopy
Requirements	<ol style="list-style-type: none"> 1. Bachelor in Physics, mechanical or system engineering or similar 2. Good knowledge of physical optics 3. First experience in laboratory with optical instruments needed (Microscope, interferometer, spectrograph). 4. First experience of electronic experimentation development mandatory 5. Strong motivation for the development of astronomical and space instruments preferred 6. Good knowledge of Matlab required
Project 7	Development of the Evanescent Wave Coronagraph testbed system control
Requirements	<ol style="list-style-type: none"> 1. Bachelor in Physics, mechanical or system engineering or similar 2. Good knowledge of physical optics 3. First experience in laboratory with optical instruments needed (Microscope, interferometer, spectrograph). 4. Strong motivation in developing system control for advanced technology setups preferred. 5. Strong motivation for the development of astronomical and space instruments preferred. 6. Good knowledge of Matlab or Python required
Project 8	Bibliographic research: Fluorescence microscopy state-of-art techniques review
Requirements	<ol style="list-style-type: none"> 1. Bachelor in Physics, mechanical or system engineering or similar 2. Good knowledge of physical optics 3. First experience in laboratory with optical instruments needed (Microscope, interferometer, spectrograph). 4. Strong motivation in developing system control for advanced technology setups preferred. 5. Strong motivation for the development of instruments for biomedical imaging preferred. 6. Good knowledge of Microsoft Office required

Project 9	Bibliographic research: Remote sensing state-of-art techniques review
Requirements	<ol style="list-style-type: none"> 1. Bachelor in Physics, mechanical or system engineering or similar 2. Good knowledge of physical optics 3. First experience in laboratory with optical instruments needed (Microscope, interferometer, spectrograph). 4. Strong motivation in high technology laser and spectrograph systems would be an asset 5. Good knowledge of Microsoft Office required
Project 10	Bibliographic research: Light concentrators state-of-art techniques review and preliminary design
Requirements	<ol style="list-style-type: none"> 1. Bachelor in Physics, mechanical or system engineering or similar 2. Good knowledge of physical optics 3. First experience in laboratory with optical instruments needed (Microscope, interferometer, spectrograph). 4. Strong motivation in developing system control for advanced technology setups preferred. 5. Strong motivation for the development of lighting and illumination management systems would be an asset 6. Good knowledge of Microsoft Office required 7. Basic knowledge of OpticStudio (Ex-ZEMAX) required