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| ANU_LOGO_mono black_FA.jpg | Position Description |

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| **College/Division:** | ANU College of Physical and Mathematical Sciences |
| **Faculty/School/Centre:**  | Research School of Astronomy and Astrophysics |
| **Department/Unit:**  | Advanced Instrumentation and Technology Centre (AITC) |
| **Position Title:**  | Project and Systems Engineer |
| **Classification:** | ANU Officer Grade 5/6 (Engineering) |
| **Position No:** |  |
| **Responsible to:** | Project and Systems Group Lead, RSAA |
| **Number of positions that report to this role:** | 0 |
| **Delegation(s) Assigned:** | 0 |

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| **PURPOSE STATEMENT:**The Research School of Astronomy and Astrophysics’ (RSAA) Giant Magellan Telescope project, and research program requires a high-level engineering team to develop innovative state-of-the-art instrumentation for observing the distant Universe, as well as for helping support existing RSAA telescopes at Siding Spring Observatory. This position will provide technical expertise in support of the program in the area of Project and Systems Engineering. **KEY ACCOUNTABILITY AREAS:****Position Dimension & Relationships:** The Project and Systems Engineer is responsible to the Project and Systems Group Lead and provides design, development, validation, and maintenance support for approved RSAA technical projects and activities. A close working relationship is required with engineers in Optical, Mechanical, Electronics, Software, Detector and Systems Engineering as well as the science teams. **Role Statement:**Under the general direction of the Project and Systems Group Lead, the Project and Systems Engineer will:* Apply body of broad technical knowledge and skills to develop areas of specialist systems skills on complex engineering projects
* Contribute to the development of budgets, effort estimations and schedules for assigned project tasks, and manage tasks with consideration of risks and ensure activities are delivered in a cost effective manner within agreed costs and schedules.
* Comply with Advanced Instrumentation and Technology Centre (AITC) technical management procedures to ensure optimum results for complex, multi-disciplinary instrumentation projects, often within the framework of international consortia.
* Maintain an up to date knowledge of state-of-the-art technology in the field of engineering.
* Function in a matrix project management structure, under the daily direction of project manager(s), project engineers and systems engineers across multiple projects.
* Provide technical and bid support for new project and proposals.
* Apply training and experience to solve engineering problems and design tests to undertake assembly integration and testing of prototype and deliverable hardware.
* Prepare technical documentation and contribute to the preparation of descriptive articles for general publication.
* Maintain a working knowledge both of best-practice engineering procedures in the context of prototype and one-off constructions, and an awareness of relevant state-of-the-art technologies that might be applied to astronomical or space research within the context of AITC engineering management procedures.
* Comply with all ANU policies and procedures, and in particular those relating to work health and safety, and equal opportunity.
* Other duties as required consistent with the classification of this position.
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| **SELECTION CRITERIA:**1. Graduate qualifications in Science, Engineering or relevant discipline, plus relevant experience within a structured system engineering environment.
2. Demonstrated experience in complex instrument or aerospace systems design including; requirements development, prototyping, build/manufacture and system validation. Experience in testing of complex systems, preferably in the context of optical /astronomical instrumentation and research is highly desirable.
3. Demonstrated experience in working in multi-disciplinary team of Engineers.
4. Proven level of written communication skills, including the ability to contribute to the preparation of material for publication in technical literature.
5. Demonstrated interpersonal and oral communication skills, including the ability to consult, and liaise effectively with a range of stakeholders, customers, industry partners, suppliers and contractors.
6. Proven ability to work flexibly, prioritise work to meet conflicting deadlines, and to quickly adapt to new environments including a demonstrated ability to use initiative, apply sound judgement and work with minimum supervision individually and within team environment.
7. A demonstrated high level of understanding of equal opportunity (EO) principles and a commitment to the application of EO policies in a university context.
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| **Supervisor/Delegate Signature:** |  | **Date:** | 13/October/2016 |
| Printed Name: | David Bundy | **Uni ID:** | U5437874 |

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| **References:** |
| [General Staff Classification Descriptors](http://info.anu.edu.au/hr/Salaries_and_Conditions/Enterprise_Agreement/2010-2012/Schedule_5) |

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|  | Pre-Employment Work Environment Report |

# Position Details

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| **College/Div/Centre** | Physical & Mathematical Sciences | **Dept/School/Section** | Research School of Astronomy & Astrophysics |
| **Position Title** | Project and Systems Engineer | **Classification** | ANU 5/6 |
| **Position No.** |  | **Reference No.** | 514426 |

In accordance with the Occupational Health and Safety Act 1991 the University has a duty of care to provide a safe workplace for all staff.

1. This form must be completed by the supervisor of the advertised position and forwarded with the job requisition to Appointments and Promotions Branch, Human Resources Division. Without this form jobs cannot be advertised.
2. This form is used to advise potential applicants of work environment issues prior to application.
3. Once an applicant has been selected for the position consideration should be given to their inclusion on the University’s Health Surveillance Program where appropriate – see . http://info.anu.edu.au/hr/OHS/\_\_Health\_Surveillance\_Program/index.asp Enrolment on relevant OHS training courses should also be arranged – see http://info.anu.edu.au/hr/Training\_and\_Development/OHS\_Training/index.asp
4. ‘Regular’ hazards identified below must be listed as ‘Essential’ in the Selection Criteria - see ‘ Employment Medical Procedures’ at http://info.anu.edu.au/Policies/\_DHR/Procedures/Employment\_Medical\_Procedures.asp

# Potential Hazards

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| 1. Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a **regular** or **occasional** part of the duties.
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| **TASK** | **regular** |  | **occasional** |  | **TASK** | **regular** |  | **occasional** |
| key boarding | [x]  |  | [ ]  |  | laboratory work | [ ]  |  | [x]  |
| lifting, manual handling | [ ]  |  | [x]  |  | work at heights | [ ]  |  | [ ]  |
| repetitive manual tasks | [ ]  |  | [ ]  |  | work in confined spaces | [ ]  |  | [ ]  |
| catering / food preparation | [ ]  |  | [ ]  |  | noise / vibration | [ ]  |  | [ ]  |
| fieldwork & travel | [ ]  |  | [ ]  |  | electricity | [ ]  |  | [ ]  |
| driving a vehicle | [ ]  |  | [ ]  |  |  |  |  |  |
| **NON-IONIZING RADIATION** |  |  |  |  | **IONIZING RADIATION** |  |  |  |
| solar | [ ]  |  | [ ]  |  | gamma, x-rays | [ ]  |  | [ ]  |
| ultraviolet | [ ]  |  | [ ]  |  | beta particles | [ ]  |  | [ ]  |
| infra red | [ ]  |  | [ ]  |  | nuclear particles | [ ]  |  | [ ]  |
| laser | [ ]  |  | [x]  |  |  |  |  |  |
| radio frequency | [ ]  |  | [ ]  |  |  |  |  |  |
| **CHEMICALS** |  |  |  |  | **BIOLOGICAL MATERIALS** |  |  |  |
| hazardous substances | [ ]  |  | [ ]  |  | microbiological materials | [ ]  |  | [ ]  |
| allergens | [ ]  |  | [ ]  |  | potential biological allergens | [ ]  |  | [ ]  |
| cytotoxics | [ ]  |  | [ ]  |  | laboratory animals or insects | [ ]  |  | [ ]  |
| mutagens/teratogens/carcinogens | [ ]  |  | [ ]  |  | clinical specimens, including blood | [ ]  |  | [ ]  |
| pesticides / herbicides | [ ]  |  | [ ]  |  | genetically-manipulated specimens | [ ]  |  | [ ]  |
|  |  |  |  |  | immunisations | [ ]  |  | [ ]  |
| **OTHER POTENTIAL HAZARDS (please specify):*** Solvents with appropriate PPE, training and MSDS/SDS knowledge.
* Liquid N2/Cooled gaseous N2, with appropriate training, PPE and MSDS/SDS knowledge
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| **Supervisor’s Signature:**  |  | **Print Name:** | **David Bundy** | **Date:** | **13/Oct/2016** |