

Competencies for General Engineering Students - NARS 2018

Level A (NARS)	A1	Identify, formulate, and solve complex engineering problems by applying engineering fundamentals, basic science and mathematics.
	A2	Develop and conduct appropriate experimentation and/or simulation, analyze and interpret data, assess and evaluate findings, and use statistical analyses and objective engineering judgment to draw conclusions.
	A3	Apply engineering design processes to produce cost-effective solutions that meet specified needs with consideration for global, cultural, social, economic, environmental, ethical and other aspects as appropriate to the discipline and within the principles and contexts of sustainable design and development.
	A4	Utilize contemporary technologies, codes of practice and standards, quality guidelines, health and safety requirements, environmental issues and risk management principles.
	A5	Practice research techniques and methods of investigation as an inherent part of learning.
	A6	Plan, supervise and monitor implementation of engineering projects, taking into consideration other trades requirements.
	A7	Function efficiently as an individual and as a member of multi-disciplinary and multi- cultural teams.
	A8	Communicate effectively – graphically, verbally and in writing – with a range of audiences using contemporary tools.
	A9	Use creative, innovative and flexible thinking and acquire entrepreneurial and leadership skills to anticipate and respond to new situations.
	A10	Acquire and apply new knowledge; and practice self, lifelong and other learning strategies.