

The University of Melbourne Archives

Records Description List

Reference Number: 2014.0100

Collection/Series Title: FACULTY OF ENGINEERING

CORRESPONDENCE FILES

014.0100: FACULTY OF E ORRESPONDENCE FILE		The University of Melbourne Archives
reator	University Of Melbourne. Faculty Of Engineering	
reator's	University Department - University	sity committee - University faculties
ctivity/Occupation		
reator's Historical Note	tor's Historical Note	

Previous Control Number: UA16 The Faculty first met in 1889, but engineering had been taught at the University since 1861 when the school opened, with one lecturer and 15 students, who attended lectures on two evenings each week. By 1861 the University offered a three-year Certificate of Engineer (CE), which required matriculation, or a two-year Certificate of Surveyor. The School occupies an important place in the history of the development and teaching of Engineering in this country as it is the oldest in Australia. There were 9 students in 1864. In 1866 the first Certificate of Engineer was awarded to William Novce Kernot, and by 1871, eight students had passed all of their subjects. Initially, and over coming decades, there was a reluctance to recognise academic training, with Melbournes wider engineering societies instead preferring apprenticeships and vocational training. William Novce Kernot joined the Faculty as a part-time lecturer in 1868. The 1870s saw the establishment of a £45 per year scholarship for Mining Engineering, donated by the Argus. Other prizes included the Stawell Exhibition in Engineering (worth £30 for two years), and a prize for Surveying (provided by Kernot himself). In 1872 the University Council asked the Government to offer students twelve months employment as an adjunct to their studies. The Government agreed, and from this time forward, the Certificate of Engineer required evidence of twelve months engagement in an engineering work under the supervision of a Mining Manager or Civil Engineer. By 1873, 11 students had passed all of their subjects. In 1874, Professor Wilson, one of founding four professors of the university, who taught mathematics and natural philosophy, died at age 48. When James Griffith. another lecturer in engineering also left the university, Henry Andrew, just 19 years old, took over his classes as a lecturer in Civil Engineering. By 1883 the Certificate of Engineer was replaced by a Bachelor of Civil Engineering, however as with the LLB, the first three years were devoted to an Arts Degree. Around this same time, five new chairs including an Engineering Chair were created at the University and Professor Kernot took the role as the Chair of Engineering and the Faculty's first full-time lecturer in Civil Engineering. By 1887 the University Council approved the creation of a Faculty of Engineering and changes to the Bachelor of Civil Engineering. The new BCE required the completion of only the first two years of Arts, which meant the classics were no longer compulsory, and the mathematic and scientific elements increased. The adjunct year of professional experience was retained. By December 1888 the Faculty of Engineering was almost established, though it took another four years for Kernot to secure all the lecturers he desired. In 1889, Kernot established the Melbourne University Engineering Society, a society open to graduates and students. By 1899, the government ioined Kernot in making £15.000 available for a new engineering building. By the 1900s, 45 students had enrolled in engineering. New courses were established, including a Diploma of Building, a Degree of Mining Engineering, a Degree in Agriculture and a School of Mining and Metallurgy, with a new building for mining, metallurgy and geology. By 1907, the Widow of George Lansell, whose 'faith in engineering' had made him Australia's first millionaire, provided a £1200 scholarship in mining. One year later, after 25 years of service, Kernot asked that his younger brother Wilfred be allowed to take over his teaching. William Kernot passed away one year later, and six years later, the Victorian Institute of Engineers established the prestigious Kernot Medal for Engineering Achievement. On Kernot's death (1909) Henry Payne assumed the Chair in Engineering (1910-1931) and he presented a comprehensive plan to The University Council requesting new staff, a new building costed at £29,000 and a further £15,000 for new equipment. In 1910 the Premier of Victoria agreed to provide £30,000 for buildings and equipment. By 1914 the new building was open however, additional grants promised by the Government had to be diverted to the war effort. Melbourne engineering students were keenly supportive of the war effort and guick to volunteer; of 29 students photographed with staff in 1915, 21 out of 29 enlisted, three volunteered and were rejected, and two worked in munitions. Enrolments after the war increased threefold between 1919 and 1921, resulting in severe overcrowding. During this time, the Faculty offered degrees in Electrical Engineering, Civil Engineering and Mechanical Engineering. In 1921, the first degree course in metallurgy was established, and the first degree was awarded in 1925. In 1926, the Mining Library was ready, and three years later, a dedicated Mining Workshop was built. Engineering degrees were now so highly regarded that the requirement that students spend an adjunct year gaining practical engineering experience before their degree was conferred was dropped. Henry Payne (1910-1931) was succeeded by Kernot's much

younger brother, Wilfred Noyce Kernot (1932-1936). Kernot's appointment to the chair came fifty years after his brother's appointment to the same position. Kernot specialized in the teaching of graphics and engineering design, with a reputation as an able teacher and administrator. Kernot was recognized as an expert on patents, electric tramways and power generation, but worked widely over the fields of mechanical, civil and electrical engineering. Aubrey Burstall (1937-1945) set about raising the profile of the newer branches of engineering as well as a research program. He developed mechanical respirators for the polio epidemic of 1937-1938 and gas producers for motor vehicles. He also laid the foundations for a degree in Chemical Engineering. The number of students rose from 194 in 1939 to 289 in 1945. In just one year, student numbers rose from 289 to 504, due to many students being beneficiaries of the Commonwealth Reconstruction Training Scheme, i.e. members of the armed services who wished to study at University. In June 1946 three Chairs were established (for Civil, Electrical and Mechanical Engineering, to be occupied by L. Matheson, (also Dean), C.E. Moorhouse and R. Blackwood). By the late 1940s the Faculty was so overcrowded that male-shift army huts appeared all over the Melbourne campus and some classrooms were held outdoors. The Chair of Metallurgy was abandoned in 1955 after the departure of H.K. Worner, but new departments with sub-professorial heads were established, with new degree courses in various branches of engineering. The fifties saw the creation of a Bachelor of Chemical Engineering and the organic chemical industry expanded rapidly to satisfy the accelerated demand for plastics and pharmaceutical manufacturing. The sixties saw the Electrical Engineering Department skyrocket, attracting the bulk of students and existing as the major focus of research. By the early '60s, the Electrical Engineering Department had acquired a MUDPAC, a Dual Package Analogue Computer, useful for designing control systems and modelling large scale dynamic systems. They also later had access to a CSIRAC, one of the world s earliest digital computers. By 1971 a NOVA minicomputer was installed in the Engineering Faculty for use by the Adaptive Communications Group. By the early 1980s, an increasing number of students enrolled in combined degrees, cut-off scores for entry began to rise rapidly and postgraduate research gained a heightened importance. Engineering developed a strong relationship with life sciences, developing automated blood pressure control systems for seriously ill patients and the bionic ear. In 1981 a Master of Engineering Science program was designed and tailored to the needs of the students from different countries. Powerful links were created, and over the next decade or so, 230 students came from overseas to study Engineering and many Australian students benefited from exchange in countries where they learnt first-hand different ways of applying engineering principles in varying contexts and broadening their cultural understanding. With a high number of engineers coming to hold management roles, the Faculty joined forces with the School of Management to run continuing education courses in Engineering Management. By 1990, there were almost 3000 undergraduate students, and the Faculty began to start a campaign of international recruitment and strategies to increase the percentage of female research students and staff. Research performance grew following the successful bidding for government-sponsored research centres that were often multi-disciplinary and multi-university arrangements, involving significant collaboration with industry. With the technological boom, a new Electrical Engineering Department moved rapidly from the worst performing department in the faculty to the best. By 2000, there were 4,000 undergraduate students enrolled in the Faculty, 25% of whom were full-fee international paying students who had come to Australia to study engineering. The Facultys research reputation continued to grow and make a serious impact at the international level. In 2004, Melbourne University was ranked 22 in the world, with Engineering and IT also ranked 22. By 2005 the Faculty offered a range of new courses including Biomedical Engineering, Engineering Management and Bimolecular Engineering. In late 2007, as part of changes relating to the introduction of the Melbourne model, the Faculty became known as the Melbourne School of Engineering. The Melbourne School of Engineering no longer has courses for undergraduate engineering degrees, all engineering courses at the University can only be undertaken at a postgraduate level. In 2011 the Melbourne School of Engineering celebrated 150 years of engineering education. N.B. - Much of the above history is taken from the website at http://www.eng.unimelb.edu.au/about/history/ and from the UMA entry at http://gallery.its.unimelb.edu.au/imu/imu.php?request=search as well as Australian Dictionary of Biography online entries.

2014.0100: FACULTY OF E		The University of Melbourne Archives
Date Range of Collection/Series	1958-1979	
Size/Extent	11 boxes (1.32 m)	
Access Conditions	Access: Restricted	

Scope and Content of Collection/Series

Previous Control Number: UM611. This series comprises a number of high level files. Subject matter includes, but is not limited to: Budgets (Departmental and Faculty level); Bursaries, Scholarships, Prizes; Courses (Structures, Policy, Postgraduate Studies, Subjects); Departments (Structures, Administration); Events (Discovery Day, Orientation Week, Honorary Degrees); External Organisations and Professional Engineering Groups; Research Grants; Staff (Appreciation/Service, Leave Reports); Statistics; Students (Clubs, Overseas, Numbers); Some files are part of a numbered filing system that was in use, however, most are not.

Collection Category	University, official
This document dated	28/05/2015

To request access to records on the list below via the University of Melbourne Archives Reading Room, quote the Unit/Box reference in full.

Unit/Box	Item Number	Title	Date Range	Description
2014.0100 Unit 1	2014.0100.0001	Applied Science Course	1968-1976	
2014.0100 Unit 1	2014.0100.0002	Engineering Continuing Education Courses	1973-1976	
2014.0100 Unit 1	2014.0100.0003	Postgraduate Studies, General: Part 1	1974-1977	
2014.0100 Unit 1	2014.0100.0004	Honorary Degrees	1974-1976	
2014.0100 Unit 1	2014.0100.0005	Engineering: Details of Subjects	1973-1976	
2014.0100 Unit 1	2014.0100.0006	Course Structures	1976	
2014.0100 Unit 1	2014.0100.0007	Engineering Courses	1968-1975	
2014.0100 Unit 1	2014.0100.0008	Engineering Workshop Training	1973-1976	
2014.0100 Unit 2	2014.0100.0009	Photogrammetry Advisory Committee	1971-1976	
2014.0100 Unit 2	2014.0100.0010	Engineering Branch Library Committee	1976	
2014.0100 Unit 2	2014.0100.0011	First Year Committee	1974-1976	
2014.0100 Unit 2	2014.0100.0012	Faculty of Engineering, Correspondence	1973-1975	
2014.0100 Unit 2	2014.0100.0013	Joint Advisory Committee, Agricultural Engineering	1973-1976	
2014.0100 Unit 2	2014.0100.0014	Special Meeting of Faculty: Correspondence	1976	
2014.0100 Unit 2	2014.0100.0015	Engineering Elections	1971-1973	
2014.0100 Unit 2	2014.0100.0016	Engineering Elections	1974	
2014.0100 Unit 2	2014.0100.0017	Engineering Elections	1975	
2014.0100 Unit 2	2014.0100.0018	Overseas Students Quotas, Selection and Limitation	1967-1976	
2014.0100 Unit 2	2014.0100.0019	Overseas Students	1970-1976	

Unit/Box	Item Number	Title	Date Range	Description
2014.0100 Unit 2	2014.0100.0020	Discovery Day	1972-1976	
2014.0100 Unit 2	2014.0100.0021	Melbourne University Engineering Students Club (MUESC)	1965-1976	
2014.0100 Unit 2	2014.0100.0022	Student Numbers	1973-1976	
2014.0100 Unit 3	2014.0100.0023	Budget and Establishment: Department of Mining	1970-1977	
2014.0100 Unit 3	2014.0100.0024	Budget and Establishment: Department of Surveying	1978	
2014.0100 Unit 3	2014.0100.0025	Budget and Expenditure Policy	1973-1977	
2014.0100 Unit 3	2014.0100.0026	Engineering : Budget and Establishment, Faculty of Engineering, Part 1	1975-1976	
2014.0100 Unit 3	2014.0100.0027	Engineering : Chairmen and Deputy Chairmen, Part 1	1973-1976	
2014.0100 Unit 3	2014.0100.0028	Engineering Staff: Leave Reports	1968-1975	
2014.0100 Unit 3	2014.0100.0029	Committee of Inquiry into Education and Training: Commonwealth Government	1977	
2014.0100 Unit 3	2014.0100.0030	Orientation Week	1975-1977	
2014.0100 Unit 3	2014.0100.0031	Australian Water Resources Council Projects	1972-1975	
2014.0100 Unit 3	2014.0100.0032	National Coal Research Advisory Committee	1976-1977	
2014.0100 Unit 4	2014.0100.0033	Engineering Budget and Establishment: Faculty of Engineering, Part 1	1970-1974	
2014.0100 Unit 4	2014.0100.0034	Engineering Budget and Establishment: Faculty of Engineering, Part 3	1977-1978	
2014.0100 Unit 4	2014.0100.0035	Mount Derrimut: Budget and Establishment	1977	

Unit/Box	Item Number	Title	Date Range	Description
2014.0100 Unit 4	2014.0100.0036	Budget and Establishment: Department of Civil Engineering	1976-1978	Previous control number 4-1-2
2014.0100 Unit 4	2014.0100.0037	Budget and Establishment: Mining and Metallurgy	1977-1978	Previous control number 4-1-4
2014.0100 Unit 4	2014.0100.0038	Budget and Establishment: Department of Mechanical Engineering	1970-1978	Previous control number 4-1-5
2014.0100 Unit 4	2014.0100.0039	Budget and Establishment: Department of Industrial Science	1977-1978	Previous control number 4-1-6
2014.0100 Unit 4	2014.0100.0040	Budget and Establishment: Department of Electrical Engineering	1977-1978	Previous control number 4-1-7
2014.0100 Unit 4	2014.0100.0041	Budget and Establishment: Department of Chemical Engineering	1977-1978	Previous control number 4-1-8
2014.0100 Unit 4	2014.0100.0042	Budget and Establishment: Agricultural Engineering	1970-1976	
2014.0100 Unit 4	2014.0100.0043	Budget and Establishment: Department of Metallurgy	1972-1977	
2014.0100 Unit 5	2014.0100.0044	Engineering Workshops	1973-1976	
2014.0100 Unit 5	2014.0100.0045	Australian Science and Technology Council	1974-1977	
2014.0100 Unit 5	2014.0100.0046	Universities Commission	1965-1975	
2014.0100 Unit 5	2014.0100.0047	Technical College Board	1966	
2014.0100 Unit 5	2014.0100.0048	Victorian Institute of Colleges	1973-1975	
2014.0100 Unit 5	2014.0100.0049	Contact Hours: Returns to Engineering Budget Committee, Part 1	1976-1978	
2014.0100 Unit 5	2014.0100.0050	Budget and Establishment: Department of Industrial Science	1970-1976	

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2014.0100 Unit 5	2014.0100.0051	Budget and Establishment: Department of Electrical Engineering	1970-1976	
2014.0100 Unit 5	2014.0100.0052	Budget and Establishment: Department of Chemical Engineering	1970-1976	
2014.0100 Unit 5	2014.0100.0053	Budget and Establishment: Department of Civil Engineering	1971-1976	
2014.0100 Unit 5	2014.0100.0054	Budget and Establishment: Department of Surveying	1972-1975	
2014.0100 Unit 6	2014.0100.0055	Selection, Quotas, Limitations Part 1	1979	
2014.0100 Unit 6	2014.0100.0056	Australian American Educational Foundation	1973-1974	
2014.0100 Unit 6	2014.0100.0057	Travel Grants and Grants-in-aid	1975	
2014.0100 Unit 6	2014.0100.0058	Australian Research Grants Committee (ARGC)	1972-1976	
2014.0100 Unit 6	2014.0100.0059	New Development Proposals: General Development Grants	1967-1976	
2014.0100 Unit 6	2014.0100.0060	Budgets Review Group	1977	
2014.0100 Unit 6	2014.0100.0061	Departmental Research Budgets: Basic Research Grants Budget Review Group	1974-1975	
2014.0100 Unit 6	2014.0100.0062	Contingency Fund	1974-1976	
2014.0100 Unit 6	2014.0100.0063	Tewksbury Fund	1973-1977	
2014.0100 Unit 6	2014.0100.0064	Future of Agricultural Engineering	1969-1971	

Unit/Box	Item Number	Title	Date Range	Description
2014.0100 Unit 6	2014.0100.0065	Minutes of Appreciation	1967-1973	Appreciation of service for Sir Ian McLennan; Frederick John Daniel Syer; G.H. Vasey; Godfrey Bernard O'Malley; Ian John O'Donnell; Sir Maurice Mawby; L.P. Coombes; Mr. P.F. Dorian.
2014.0100 Unit 6	2014.0100.0066	Departmental Structure and Administration	1973-1974	
2014.0100 Unit 6	2014.0100.0067	Engineering Policy	1971-1974	
2014.0100 Unit 7	2014.0100.0068	Statistics	1961-1965	
2014.0100 Unit 7	2014.0100.0069	Selection, Quotas, Limitations	1977	
2014.0100 Unit 7	2014.0100.0070	Selection, Quotas, Limitations	1978	
2014.0100 Unit 7	2014.0100.0071	Selection, Quotas, Limitations Part 2	1979	
2014.0100 Unit 8	2014.0100.0072	Selection, Quotas, Limitations	1973-1975	
2014.0100 Unit 8	2014.0100.0073	Selection, Quotas, Limitations	1976	
2014.0100 Unit 8	2014.0100.0074	Statistics	1969-1976	
2014.0100 Unit 8	2014.0100.0075	Statistics	1966-1969	
2014.0100 Unit 9	2014.0100.0076	Lorna Stirling Estate Fund, David Thompson Scholarship, Thomas Ewing Scholarship	1972-1973	Previous control number 5-25-1
2014.0100 Unit 9	2014.0100.0077	Clarence William Newsome (C. W. N.) Sexton Scholarships	1970-1974	Includes Obituary for Sexton, former Associate Professor in Civil Engineering; Scholarships is for African or Asian students from British Commonwealth Countries
2014.0100 Unit 9	2014.0100.0078	Julian King Prize	1965-1966	
2014.0100 Unit 9	2014.0100.0079	Union Carbide Prize	1968-1977	

Unit/Box	Item Number	Title	Date Range	Description
2014.0100	2014.0100.0080	Engineering Research	1973	
Unit 9		Scholarships		
2014.0100	2014.0100.0081	Engineering Research	1974	
Unit 9		Scholarships		
2014.0100	2014.0100.0082	Engineering Research	1975	
Unit 9		Scholarships	1	
2014.0100 Unit 9	2014.0100.0083	Engineering Research Scholarships	1976	
2014.0100 Unit 9	2014.0100.0084	Australian Portland Cement Ltd. Prize	1969	
2014.0100 Unit 9	2014.0100.0085	Fiat of Australia Scholarship	1967-1968	
2014.0100 Unit 9	2014.0100.0086	M. H. De Fina Prize (Mechanical Engineering)	1968-1969	
2014.0100 Unit 9	2014.0100.0087	Petroleum Refineries Australia Ltd.	1968-1969	
2014.0100 Unit 9	2014.0100.0088	Kernot Medal: Meeting of Assessors	1975	
2014.0100 Unit 9	2014.0100.0089	Selection, Quotas, Limitations	1968-1972	
2014.0100 Unit 10	2014.0100.0090	Dow Scholarship	1976	
2014.0100 Unit 10	2014.0100.0091	Conzinc Rio Tinto of Australia Limited (C. R. A.)	1972	
2014.0100 Unit 10	2014.0100.0092	Conzinc Rio Tinto of Australia Limited (C. R. A.)	1973	
2014.0100 Unit 10	2014.0100.0093	Conzinc Rio Tinto of Australia Limited (C. R. A.)	1974-1975	
2014.0100 Unit 10	2014.0100.0094	Conzinc Rio Tinto of Australia Limited (C. R. A.) Undergraduates Scholarships	1974	
2014.0100 Unit 10	2014.0100.0095	Ormsby Hamilton Radio Prize	1971-1976	
2014.0100 Unit 10	2014.0100.0096	Buckland Foundation	1970-1975	
2014.0100 Unit 10	2014.0100.0097	B.B.R. (BBR Company Pty Ltd) Prize	1965	Prize in Civil Engineering Theoretic or Practical Aspects of Prestressing
2014.0100 Unit 10	2014.0100.0098	Cable Makers Association Prize	1967-1969	
2014.0100 Unit 11	2014.0100.0099	Kernot Medal	1960-1973	

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Unit/Box	Item Number	Title	Date Range	Description
2014.0100 Unit 11	2014.0100.0100	Scholarships and Cadetships	1962-1978	
2014.0100 Unit 11	2014.0100.0101	Bursaries	1976-1977	
2014.0100 Unit 11	2014.0100.0102	C. W. N. Sexton Scholarship	1968	
2014.0100 Unit 11	2014.0100.0103	A. J. Francis Prize	1969-1974	
2014.0100 Unit 11	2014.0100.0104	Raymond E. Purves Clyde Industries Scholarship	1960-1962	
2014.0100 Unit 11	2014.0100.0105	Shell Scholarship	1968-1973	
2014.0100 Unit 11	2014.0100.0106	Scholarships: Information and Prizes	1958-1975	
2014.0100 Unit 11	2014.0100.0107	Scholarships: Withdrawn	1970-1977	
2014.0100 Unit 11	2014.0100.0108	Research Grants and Scholarships	1974-1978	

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