Université d'Ottawa/ University of Ottawa Faculté de Génie/ Faculty of Engineering

Brief History of the Dept. of Electrical Engineering (1956-97)

In 1946, the School of Applied Science was created, which offered the first two years of engineering, leading to a Bachelor of Applied Science degree, with specialization in any of the following programs: Civil, Electrical and Mechanical Engineering, Geological, Mining and Metallurgical Engineering. Students completing the second year could be admitted to other Canadian universities, offering the above specializations. Special arrangements were made with Laval and McGill Universities, and negotiations started with others, for the granting of course equivalencies and advanced standing. The School was directed by a Council, which in 1948 was presided by the Rector, the Reverend Father T.R.P.Jean-Charles Laframboise, with Louis Cloutier as Director, René Lavigne, Secretary, Anatole Walker, Assistant Secretary and J.T. Duprat and J.Lefaivre as councillors. It is interesting to note that one of the professors, teaching physics, was Larkin Kerwin who later became Rector of Laval University and President of the National Research Council of Canada. Louis-Alfred Beauchesne was also one of the early professors in the School in 1946, teaching physics and applied mathematics, and continued on teaching in the Dept. of Electrical Engineering till his retirement in 1983.

In 1953, the School of Pure and Applied Science was established, gaining full Faculty status in 1962. Dr Pierre Gendron of the Université de Montréal became Dean. With assistance from the provincial government after the Second World War, the University was finally able to establish a full academic unit devoted to the study of sciences and engineering.

The Dept. of Electrical Engineering was formed in 1956 with **Colonel R.A. Harvey Galbraith**, OBE, as Chairman. A program leading to a BASc was offered in the following year. A new building (the now defunct Vachon Hall) was completed in 1957. The first graduation was in 1959.



1959: The first Graduating Class in Electrical Engineering **Colonel Galbraith**, OBE, Chairman (1956-59), in the centre.

The same year, 1959, Professor George S. Glinski became Chairman. He was co-founder of Computing Devices of Canada (1948), which grew into one of Canada's first publicly traded, export-oriented technology companies and produced such spinoffs as Northern Electric (now NORTEL Networks), Gandalf Technologies and Leigh instruments. He is widely considered as the father of high-technology in Canada. The first MASc and PhD theses were defended in 1961.



Prof. George S. Glinski Chairman 1959-70 Vice-Dean of the Faculty of Pure and Applied Science



Prof. Louis-Alfred Beauchesne Acting Chairman 1970-71.

In 1970, the Faculty of Pure and Applied Science was renamed Faculty of Science and Engineering, reflecting the growth of the latter sector as a professional stream. In that same year, the Engineering Departments moved to a brand-new building, Colonel By Hall.



Colonel By Hall



Prof. Clement Lemyre Chairman 1971-78

The Department passed difficult years in the mid '70s period, but it recovered and its operations started growing rapidly. Professors Stan S. Stuchly and Kamilo Feher were hired in those years and became research super-stars in Canada.



Prof. Wolfgang J.R. Hoefer Chairman 1978-81



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Prof. Nicolas D. Georganas Chairman 1981-84 Founding Dean of Engineering 1986-93 The Department celebrated its 25th anniversary in 1982. It had then 14 regular professors, 7 adjunct professors, 65 graduate students (including 15 PhD students) and 380 undergraduate students.

A selective undergraduate co-op program with industry started in Jan. 1981. A Master's co-op program started in 1982-83.

The Computer Engineering option in Electrical Engineering (in co-operation with Computer Science) was added in 1983 and became a full BASc program in 1989.



Prof. Willem Steenaart Chairman 1984-86 Associate Dean (Engineering) 1983-84

The desire of the engineering professors for greater professional recognition and development led to the logical separation into the Faculties of Engineering and of Science, as of July 1, 1986. Nicolas D. Georganas (PhD'70, Electrical) became the founding Dean of the Faculty of Engineering and served till 1993.



Prof. Stan S. Stuchly Chairman 1986-88

The following research Chair was established:

• BNR/NSERC Industrial Research Chair in Signal Transmission Technology (1986-91) (Prof. W. McGee)



Prof. Morris Goldberg Acting Chairman Jan.-July 1988

In 1988, the seven Ontario Centres of Excellence were established. The Department was one of the founding members and major participant in the *Telecommunications Research Institute of Ontario (TRIO)*. The Centres were renewed for a total of 10 years and in 1998 received further

renewal, but after a merger among two of them, TRIO became CITO (Communications and Information Technology Ontario).



Prof. George Costache Acting Chairman 1988-89 Chairman 1992-95

The following research chair was established:

• OCRI/NSERC Industrial Research Chair in High-Speed Networking System Architectures (1993-95) (Prof. P. Papantoni-Kazakos)



Prof. Nasir U. Ahmed Chairman 1989-92

With the creation of the new BASc in Computer Engineering (1989), the Department was renamed Electrical and Computer Engineering. All programs were offered in French for the first two years of studies. Electrical Engineering offers the majority of courses in French as well, whereas Computer Engineering received additional resources from CEFO (Franco-Ontarian Education Council) to become completely bilingual.

At the Federal level, participation in the federal Networks of Centres of Excellence (NCEs) started in 1990 with the establishment of the *Canadian Institute for Telecommunications Research (CITR (1990-2002)).*

Outstanding teacher Prof. David T. Gibbons received the prestigious Ontario OCUFA Teaching Award in 1990.

The following research chair was established:

• OCRI/NSERC Industrial Research Chair in Real-Time Multimedia Distributed Database Systems (1991-2001) (Prof. A. Karmouch)

New agreements of international exchange and co-operation with several universities in developed and developing nations were established. The most noteworthy are:

- the establishment of a Telecommunications Centre of Excellence at the Jordan University of Science and Technology (JUST), with the help of a five-year, \$1 million grant from CIDA, awarded in 1989.
- the establishment of a student exchange program with Télécom-Paris (ENST), whereby up to ten final year students in the telecommunications concentration in Electrical Engineering at U.of O. do their final year of studies in Paris, and up to ten ENST students do their final year of Dip.Ing. studies at U.of O. and also complete an M.A.Sc. degree.
- the establishment of a student exchange program with "Grandes Ecoles" in the Rhône-Alpes region, particularly with INSA-Lyon and Ecole des Mines de Saint Etienne .

OCRInet, the regional broadband ATM network (45 Megabits per sec), became functional in January 1994 and connected the University with 11 other Industrial and Academic Institutions in

Ottawa-Carleton, for research purposes. Electrical and Computer Engineering researchers made use of this high-speed communications facility) and also succeeded in connecting the University video-conferencing rooms with a compatible facility at Carleton University for the purpose of distance learning experiments at high video/audio quality.



Prof. Emil M. Petriu Chairman 1995-97

In 1995, the Department became partner in a new Network of Centres of Excellence, the *TeleLearning NCE (1995-2002)*.

On March 20, 1997, the School of Information Technology and Engineering (SITE), a major initiative of Dean Gilles Patry, was officially launched and became operational on May 1, 1997. It regrouped the Department of Electrical and Computer Engineering and the Department of Computer Science (which was relocated from the Faculty of Science) into a new entity. A new 173,000 sq.ft building for SITE became ready for occupancy in 2002.

N.D.Georganas 2004.12.10