Grenoble INP phelma

Master of engineering in

Signal and **Image Processing, Communication Systems, Multimedia**

PRESENTATION

Signal Image Communication Multimedia (SICOM) offers you a two years cursus, jointly performed by Phelma and Ense[3], to prepare a high level engineer degree in both information System, Communication and Signal / Image / Multimedia. Our programme prepares the students for a successful future engineer's career in industrial research and development in various fields involving skills in signal or image processing, communications, computer sciences, electronics and multimedia. The program is also designed to provide strong fundamental bases for further PhD studies. Emphasis is put on practical training and most theoretical courses are coupled with labworks and integrated projects. All courses and practicals can be taught in English. Teaching staff includes faculty members from Grenoble-INP, full time researchers from CNRS as well as professional engineers from -usually international- companies located in Grenoble and around. The curriculum includes two internships (10 weeks and 6 months,) during which the students work fulltime, either in industry or in academic research facility. Students will receive an Engineer Degree from the Grenoble Institute of Technology, and a master degree.

INDUSTRIAL SECTORS

Students with the SICOM program have a strong background in three major topics (Signal – Image processing, electronics and computer sciences). They have career options in various industrial sectors offered in research & development, production, maintenance, by manufacturers, service providers and consultancies. They occur in large industrial groups as well as in small innovative private specialist firms in many industrial sectors, such as information industries, telecommunications, bio-imaging, environmental, renewable energies sector or leisure industry. Grenoble's very dense and active industrial and research network knows as the French Silicon Valley is an excellent field where more than 10.000 jobs are provided by the SICOM's skills. Opportunities span from design of electronic systems for information processing, advanced digital communications systems, development of systems and complex signal and image processing algorithms to mention few. Career opportunities can be found in Research as 15 % of SICOM Engineers reach a PhD program.

RESEARCH

SICOM program is well connected within Grenoble's very dense and active industrial and academic research as well as French major scientific networks providing internship and job opportunities. Students from SICOM program can have internship session in the best laboratories on site, abroad or in industrial and international partner laboratories (GIPSA-Lab, Grenoble Institute of Neurosciences , EDF, ST-Microelectronic, EADS, Altran, GE, Trixell, ID3, INRIA, CNES, THALES, ALTEN, TOY Films, MORPHO, ONERA, MBDA, PARROT etc.).

ASSETS

SICOM program thrives at training students by providing an integrated work (lab work in the best platforms, courses etc) in close contact with academic staff and researchers belonging to the world-class laboratories on site.

Students will actively participate in these courses through team working, report writing and presentations and will participate in labworks experiments dealing with electronics instrumentation, image, and signal speech processing on real examples. Collaborations with professionals from major industries, research institutions are actively encouraged by invited lectures, seminars, on-site visits so as to facilitate direct contact with the students.

CONTACT

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Grenoble INP - Phelma is the school for scientific diversity. It offers its students courses in various fields with a promising future: **micro and nano-technologies** (micro / nano-electronics, nano-sciences, materials, health, building, etc.), **energy** (nuclear energy, renewable energies, accumulators, etc.), **innovative materials** (for aeronautics, automobiles, sport & leisures, health, microelectronics, energy, etc.), **information technology** (digital technologies, image and signal processing, telecommunications, computer science & networks, embedded softwares, etc.), **biomedical engineering** (medical imagery and therapy, implantable devices, etc.) and the **environment** (eco-processes, energy management, natural signal analysis, etc.).

Based in Grenoble in the heart of the French Rhône Alpes region, Phelma boasts a rich academic and industrial infrastructure. As the only teaching institute on the Minatec innovation campus, Phelma benefits from an exceptional Training / Research / Industry synergy.

Key figures: more than 1,200 students, plus 300 engineering graduates a year, 150 permanent research lecturers from the school's thirteen partner laboratories, 200 speakers from industry and the world of research, plus 25% of engineering students studying for doctorates.

PRESS RANKINGS

QS WORLD UNIVERSITY RANKINGS Grenoble INP, leader in 2 lists from QS World University Rankings Engineering & Technology 2014

L'USINE NOUVELLE Grenoble INP ranked 2nd by L'Usine Nouvelle among the 100 best french engineering schools in 2014

Grenoble INP ranked 1st by « Industrie et Technologies » in 2013

Forbes Grenoble, ranked 5th World's most inventive city by Forbes in 2013