

اضاف موقع كيو اس (QS) معلومات عن كل برنامج من البرامج التعليمية في الجامعة مع كافة التفاصيل. تفضلكم تزويدنا بالمعلومات وفق الجدول ادناه ولكل برنامج تعليمي (اولية – ماجستير – دكتوراه – دبلوم) لغرض رفعها على الموقع والتي يجب ان تكون باللغة الانكليزية وكذلك الصفحات الالكترونية التي يجب الاستشهاد بها يجب ان تكون باللغة الانكليزية. يمكن اضافة البرامج المقترحة وقيد التفعيل ايضا.

| تفاصيل البرنامج الواحد |   |                         |                               |
|------------------------|---|-------------------------|-------------------------------|
|                        |   | Program ID              | رمز البرنامج                  |
|                        | M.Sc. in Electrical Engineering /<br>Electronics and Communications   | Program name            | اسم البرنامج                  |
|                        | College of Engineering  | College Name            | الكلية                        |
|                        | Department of Electrical<br>Engineering   | Department Name         | القسم                         |
|                        | <a href="https://uomosul.edu.iq/en/engineering/">https://uomosul.edu.iq/en/engineering/</a>   | Program URL             | الموقع الالكتروني<br>للبرنامج |
|                        | Master of Science   | Degree Name             | اسم الدرجة                    |
|                        | Masters   | Study Level             | مستوى الدراسة                 |
|                        | Full-time   | Course Intensity        | نوع الكورس                    |
|                        | On campus   | Study Mode<br>Full-time | طبيعة الدراسة                 |
|                        |   |                         | تفاصيل البرنامج               |
|                        | - Engineering   | Broad Subject Area      | الموضوع العام                 |
|                        | Electrical Engineering  |                         | Main<br>Subject :             |
|                        |   | Custom Subject          | الموضوع اذا لم<br>يكن مذكور   |
|                        | Electronics & communications  | Specialization          | الاختصاص                      |
|                        | <b>The Master of Science in Electrical Engineering/Electronics and Communications</b> is a graduate-level academic program designed to provide students with advanced knowledge, technical skills, and research experience in key areas of electrical engineering.<br>The program prepares graduates for leadership roles in industry, academia, and research institutions, addressing current and future technological | Program Description     | وصف البرنامج                  |

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|  | <p>challenges.</p> <p><b>Program Objectives</b></p> <ul style="list-style-type: none"> <li>• To deepen students' understanding of core concepts in electrical engineering.</li> <li>• To provide specialized investigation of specialized areas such as Modern control theory, VLSI, communication engineering, and embedded systems.</li> <li>• To develop students' ability to conduct independent research, analyze complex engineering problems, and apply innovative solutions.</li> <li>• To prepare graduates for Ph.D. studies or advanced professional roles in engineering and technology.</li> </ul> <p><b>Program Structure</b><br/>The program typically spans <b>2 years</b> and includes the following components:<br/><b>Courses:</b> Advanced mathematics, research methodology, Control Engineering Signal Processing and Communications Embedded Systems and VLSI Design<br/><b>Research/Thesis:</b><br/>Students complete a research thesis under faculty supervision, contributing original knowledge to the field.</p> |                                    |                                  |
|  | <p><a href="https://uomosul.edu.iq/en">https://uomosul.edu.iq/en</a></p>   | <p>University Official Website</p> | <p>موقع الجامعة الإلكتروني</p>   |
|  | <p>electdep@uomosul.edu.iq</p>   | <p>Get more details (email) :</p>  | <p>بريد الإلكتروني للاستفسار</p> |
|  | <p>1. What are the most in-demand specializations within Electrical Engineering for Master's students?</p>   | <p>Question 1/5</p>                | <p>خمسة أسئلة عن البرنامج</p>    |

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|  | <ol style="list-style-type: none"> <li>2. How does a Master's degree in Electrical Engineering enhance job opportunities or research prospects compared to a Bachelor's degree?</li> <li>3. What software tools or technical skills are essential for success in graduate-level electrical engineering studies?</li> <li>4. What are common research areas or thesis topics currently trending in electrical engineering graduate programs?</li> <li>5. How do industry trends and emerging technologies influence the curriculum and research focus in Master's programs in Electrical Engineering?</li> </ol>   |            |                        |
|  | <ol style="list-style-type: none"> <li>1. Currently, the most in-demand specializations include: <ul style="list-style-type: none"> <li>● <b>Control Systems and Automation</b> – essential in robotics, manufacturing, and advanced system design.</li> <li>● <b>Embedded Systems and IoT</b> – critical for everything from consumer electronics to industrial monitoring.</li> <li>● <b>Communication Systems</b> – especially with the rise of 5G and wireless sensor networks.</li> <li>● <b>Machine Learning and AI Applications in EE</b> – a growing area in signal processing, diagnostics, and energy forecasting.</li> </ul> </li> <li>2- A Master's degree provides: <ul style="list-style-type: none"> <li>● <b>Deeper specialization</b>, allowing graduates to take on more complex engineering</li> </ul> </li> </ol> | Answer 1/5 | خمسة اجوبة عن البرنامج |

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|  | <p>and R&amp;D roles.</p> <ul style="list-style-type: none"> <li>● <b>Higher salaries and better positions</b>, especially in competitive sectors like renewable energy, defense, or aerospace.</li> <li>● <b>Opportunities in academia and research</b>, including PhD pathways.</li> <li>● <b>Access to advanced tools and methodologies</b>, making candidates more valuable in industry.</li> <li>● <b>Leadership and project management roles</b>, which often require postgraduate qualifications.</li> </ul> <p>3- Key tools and skills include:</p> <ul style="list-style-type: none"> <li>● <b>MATLAB/Simulink</b> – for modeling, simulation, and control system design.</li> <li>● <b>PSCAD / ETAP / DigSILENT PowerFactory</b> – used in power system analysis and protection studies.</li> <li>● <b>Python / C++ / LabVIEW</b> – for scripting, automation, and interfacing with hardware.</li> <li>● <b>FPGA and VHDL/Verilog</b> – for students working with digital systems and embedded design.</li> <li>● <b>AutoCAD Electrical / PCB Design tools</b> – for circuit design and hardware layout.</li> <li>● <b>Machine learning libraries</b> – like TensorFlow or Scikit-learn, for AI-focused research in signal and system analysis.</li> </ul> <p>4- Trending research areas include:</p> <ul style="list-style-type: none"> <li>● Modern communications of smart city</li> </ul> |  |  |
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|  | <ul style="list-style-type: none"> <li>● Industrial communications of electrical infrastructure</li> <li>● Digital electronics and intelligent systems</li> <li>● Communication networks and Cybersecurity of electrical infrastructure</li> <li>● Microelectronics and integrated circuits design</li> </ul> <p>5-Industry trends directly shape curriculum by:</p> <ul style="list-style-type: none"> <li>● <b>Driving the inclusion of new courses</b> (e.g., smart grids, EV systems, AI in electrical systems).</li> <li>● <b>Encouraging interdisciplinary research</b> that blends EE with computer science, data analytics, and mechanical engineering.</li> <li>● <b>Aligning student projects with real-world needs</b>, such as sustainability, automation, and digitalization.</li> <li>● <b>Promoting collaboration with industry partners</b>, who often fund research or provide internship opportunities.</li> <li>● <b>Ensuring graduates are workforce-ready</b>, with practical experience in technologies like IoT, cloud-based SCADA, and predictive maintenance tools.</li> </ul> |                      |                              |
|  | - 36  | Duration Unit:       | الوحدات                      |
|  | 2 years   | Duration             | نوع البرنامج                 |
|  | September   | Start Month-         | بداية البرنامج (شهر)         |
|  | June, (subjected to change)   | Application Deadline | موعد انتهاء التقديم للبرنامج |

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|  | Refer to the academic calendar:<br><a href="https://uomosul.edu.iq/en/calendar">https://uomosul.edu.iq/en/calendar</a>  |                             |                |
|  | Iraqi Dinar (IQD)   | Fees Currency:              | العملة         |
|  | 7,500,000   | Price Information           | معلومات الاجور |
|  |   |                             |                |
|  | Competition admission test  | Exam Type:                  | نوع الامتحان   |
|  | <p>Master's applicants must have a GPA of no less than <b>65%</b>, or must have graduated in the <b>top quarter</b> of their class.<br/>Applicants must have at least <b>two years of actual service</b> after obtaining their most recent academic degree.</p> <p>All applicants to postgraduate studies are required to pass the <b>Unified National Arabic Language Proficiency Test</b> as a mandatory condition for admission.<br/><i>Applicants holding equivalent certified qualifications may be exempt, subject to ministry regulations</i></p> <p>All applicants to postgraduate studies are required to pass the <b>Unified National English Language Proficiency Test</b> with a score not less than the minimum set by the Ministry of Higher Education and Scientific Research.</p> <p>This requirement may be substituted with a valid TOEFL</p> | Entry Requirements (Other): | متطلبات اخرى   |

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|  | <p>or IELTS certificate in accordance with ministry regulations</p> <p>All applicants to postgraduate studies are required to successfully pass the <b>Iraqi National Computer Proficiency Test</b>, which is considered a core requirement for admission to Master's and Doctoral programs, in accordance with the current regulations of the Ministry of Higher Education and Scientific Research.</p>           |   |  |
|  | <p>Full Fees: 2.25 million dinars per year, around 1700\$.</p> <p>However international students are eligible to apply for full or half fees waving, according to the instruction given in the following website:<br/> <a href="https://mofa.gov.iq/colombo/wp-content/uploads/sites/11/2024/12/Study-in-Iraq-EN.pdf">https://mofa.gov.iq/colombo/wp-content/uploads/sites/11/2024/12/Study-in-Iraq-EN.pdf</a></p> | Min Total Tuition Fees (Domestic) :               | الحد الأدنى لإجمالي الرسوم الدراسية (المحلية):               |
|  | 2,250,000 ID/year  | Max Total Tuition Fees (Domestic) :               | الحد الأقصى لإجمالي الرسوم الدراسية (المحلية):               |
|  | Full fees waving available for certain cases   | Min Total Tuition Fees (Domestic, In State) :     | الحد الأدنى لإجمالي الرسوم الدراسية (المحلية، داخل الولاية): |
|  | 2,250,000 ID/year  | Max Total Tuition Fees (Domestic, In State) :     | الحد الأقصى لإجمالي الرسوم الدراسية (المحلية، داخل الولاية): |
|  | Full fees waving available for certain cases   | Min Total Tuition Fees (Domestic, Out of State)   | الحد الأدنى لإجمالي الرسوم الدراسية (المحلية، خارج الولاية)  |
|  | 2,250,000 ID/year  | Max Total Tuition Fees (Domestic, Out of State) : | الحد الأقصى لإجمالي الرسوم الدراسية (المحلية، خارج الولاية): |

|                            |  |   |  |
|----------------------------|--|---|--|
|                            | Full fees waving available for certain cases   | Min Total Tuition Fees (International) :  | الحد الأدنى لإجمالي الرسوم الدراسية (الدولي):                |
|                            | 2,250,000 ID/year  | Max Total Tuition Fees (International) :  | الحد الأقصى لإجمالي الرسوم الدراسية (الدولي):                |
|                            | Iraqi Dinar  | Tuition Fee - Currency :  | الرسوم الدراسية - العملة :                                   |
|                            | NO   | Are candidates required to submit references or letter(s) of recommendation for acceptance? | هل يتعين على المرشحين تقديم مراجع أو خطابات توصية للقبول؟    |
|                            | No   | Are candidates required to submit an essay(s) for acceptance?                               | هل يتعين على المرشحين تقديم مقال (مقالات) للقبول (بروبوزال)؟ |
|                            | 2 years  | Minimum Professional Experience (in years) :  | الحد الأدنى من الخبرة المهنية (بالسنوات):                    |
| الدعم المالي Financial Aid |  |   |  |
|                            | No   | Is there a school sponsored scholarship or financial aid?                                   | هل هناك منحة دراسية أو مساعدات مالية ترعاها الكلية أو القسم؟ |
|                            | N/A  | Annual school budget for all scholarships :   | ميزانية الكلية أو القسم السنوية لجميع المنح الدراسية :       |
|                            | Iraqi Dinar  | Currency :  | العملة   |
|                            | The University covers tuition fees and accommodation for international students from all around the world. | Scholarship Information :   | معلومات المنحة   |
|                            |  |   |  |
|                            | 10   | Students per Class :  | الطلاب لكل فصل :   |
|                            | 26 years   | Average age (in years) :  | معدل عمر الطلبة  |
|                            | Not Required   | Average years of work experience  | متوسط سنوات الخبرة   |



|  |   |   |   |
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|  |   | at managerial level :                       | في العمل على المستوى الإداري:               |
|  | 70 %<br>(Pass mark)   | Average GMAT score for your cohort :        | معدل درجات التخرج                           |
|  | 700,000 IQD   | Average salary after graduation :           | متوسط الراتب بعد التخرج :                   |
|  | N/A   | Percent employment after graduation :       | نسبة التوظيف بعد التخرج:                    |
|  | ISO IEC 17025/2017  | Program accreditations :                    | اعتمادات البرنامج<br>)<br>الاعتمادية<br>(ة) |
|  | N/A   | Average work experience (in years) :        | متوسط الخبرة العملية<br>(بالسنوات):         |
|  | 1   | Number of nationalities in current cohort : | عدد الجنسيات في وجبة التخرج الحالي :        |
|  |   |   |   |
|  | Department of Electrical Engineering  | Institution Profile Name Display :          | اسم الكلية او القسم                         |
|  | 1964-1965   | Foundation Year :                           | سنة التأسيس                                 |
|  |  | Current Logo :                              | شعار الكلية او القسم                        |