

**Ministry of Higher Education and Scientific Research
Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic Accreditation
Accreditation Department**



Academic Program and Course Description Guide

2024

Introduction:

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

Concepts and terminology:

Academic Program Description: The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

Course Description: Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

Program Vision: An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

Program Mission: Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

Program Objectives: They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

Curriculum Structure: All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

Learning Outcomes: A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

Teaching and learning strategies: They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

Academic Program Description Form

University Name: University of Technology

Faculty/Institute: College of Engineering

Scientific Department: Communication Engineering

Academic or Professional Program Name: Optical Communication Engineering

Final Certificate Name: Bachelor of Science in Optical Communication Engineering

Academic System: Annual

Description Preparation Date: 10-April-2024

File Completion Date: 15-April-2024

Signature: _____



Head of Department Name:

Date: 14/4/2024

Signature: _____



Scientific Associate Name:

Asst. Prof. Dr. Ali J. Salim

Date: 14/4/2024

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:



Approval of the Dean:

Afaneen Anwer Abboud

- **Program Vision**

The Optical Communication Systems Engineering Branch aims to be a prominent leader in fostering the development of future communication engineers. We aim to become a program that is well acknowledged on a global scale, recognized for:

- **Innovative Teaching Methods:** We will consistently develop new and original teaching approaches, utilizing state-of-the-art technologies to establish a lively and engaging learning environment.
- **Academic Proficiency:** Our graduates will have a profound comprehension of optical communication principles as well as a complete understanding of key collaboratively subjects, enabling them to address challenging difficulties at the forefront of the field.
- **Research Impact:** Our vision is to become a dynamic center for innovative research, influencing the development of optical communication technologies by working together with industry leaders and academic institutions around the globe.
- **Societal Responsibility:** The objective of our program is to develop engineers who prioritize ethical considerations and are dedicated to creating solutions that effectively tackle pressing community issues, thereby promoting a more interconnected and economically viable future.

• Program Mission

The mission of the Optical Communication Engineering Systems Branch is to educate and train engineers with a bachelor's degree in communication engineering sciences, focusing on Optical Communication Systems. Our goal is to meet the changing demands of modern society while remaining dedicated to technical and scientific progress.

The mission is accomplished by employing a comprehensive strategy that involves improving the teaching faculty, establishing advanced laboratories and libraries, and continuously improving the curriculum. In the field of optical communication engineering, the branch aims to achieve both numeric and qualitative expansion, ensuring that its educational endeavors are in line with the overall goals of the institution. This involves integrating developing channels and pathways into both undergraduate and postgraduate degrees, in alignment with the most recent technological breakthroughs and innovations.

• Program Objectives

The Optical Communication Engineering Systems Branch aims to graduate highly qualified communication engineers equipped with expertise in both foundational knowledge and contemporary advancements within the field. This is achieved by aligning our curriculum with evolving community needs and fostering a continuous process of improvement.

Key Objectives:

- **Graduate Development:** We aim to produce graduates with strong quantitative and qualitative grounding in optical communication engineering principles.
- **Faculty and Infrastructure Enhancement:** We are dedicated to the ongoing development of our faculty's technical and scientific proficiency.

This commitment extends to the advancement of our laboratories, libraries, and curriculum to ensure they remain aligned with cutting-edge technologies.

- **Programmatic Expansion:** In line with the university's core mission, we actively seek to broaden undergraduate and postgraduate study opportunities by introducing novel channels and pathways that reflect the latest technological trends.

● **Program Accreditation**

The program has no accreditation yet. However, the department goal is acquiring accreditation from the Iraqi Council of Accreditation for Engineering Education.

● **Other external influences**

Is there a sponsor for the program? NO

● **Program Structure**

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	11	20	12.14%	
College Requirements	15	34	21.38%	
Department Requirements	48	105	66.21%	
Summer Training	Yes			
Other				

* This can include notes whether the course is basic or optional.

● Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
2023 – 2024				
Level-1/ 1st Semester	CE1101	Technical English I	1	-
	CE1102	Mathematics I	4	-
	CE1103	Computer Science I	1	1
	CE1104	Electronics I	2	-
	CE1105	Engineering Drawing	-	3
	CE1106	Digital Techniques	2	-
	CEM1107	Physics of Semiconductors	2	-
	CE1108	Electrical Engineering Fundamentals I	2	-
	CE1109	Workshops I	-	4
	CE1110	Human Rights	1	-
Level-1/ 2nd Semester	CE1110	Electrical and Electronic Lab. I	-	3
	CE1201	Technical English II	1	-
	CE1202	Mathematics II	4	-
	CE1203	Computer Science II	1	1
	CE1204	Measurements and Instrumentations	2	-
	CE1205	Auto CAD	-	3
	CE1206	Probability and Statistics	2	-
	CEM1207	Physics of Materials	2	-
	CE1208	Electrical Engineering Fundamentals II	2	-
	CE1209	Workshops II	-	4
Level-2/ 1st Semester	CE1210	Electrical and Electronic Lab. II	-	3
	CE2101	Physics of Optics	2	-
	CE2102	Mathematics III	4	-
	CE2103	Electronics II	2	-
	CE2104	Computer Programming	1	1
	CE2105	Electromagnetic fields I	2	-
	CEM2106	Analog Communication Systems I	2	-
	CE2107	Baath Party crimes	1	-
	CE2108	Transmission Lines	2	-
CE2109	Analog Communications and Electronics Lab.I	--	6	
Level-2/ 2nd Semester	CE2201	Physics of optical elements	2	-
	CE2202	Mathematics IV	4	-
	CEM2203	Optical Sensor	2	-
	CE2204	Microprocessor Engineering	2	-
	CE2205	Electromagnetic Fields II	2	-
	CEM2206	Analog Communication Systems II	2	-
	CE2207	Arabic Language	1	-

	CE2208	Electronic Communication	2	-
	CE2209	Analog Communications and Electronics Lab.II	-	6
Level-3/ 1st Semester	CE3101	Numerical Analysis I	2	-
	CE3102	Engineering Analysis I	4	-
	CE3103	Control Engineering I	2	-
	CE3104	Digital Communication I	2	-
	CEM3105	Optical Fiber Communication I	2	-
	CE3106	Signals and Systems I	2	-
	CEM3207	Antenna Theory and Propagation	2	-
	CE3108	Antennas and Control Lab.	-	4
	CE3109	Microprocessor and Digital Communication Lab.	-	4
Level-3/ 2nd Semester	CE3201	Numerical Analysis II	2	-
	CE3202	Engineering Analysis II	4	-
	CE3203	Control Engineering II	2	-
	CE3204	Digital Communication II	2	-
	CEM3205	Optical Fiber Communication II	2	-
	CE3206	Signals and Systems II	2	-
	CEM3207	Microwave Engineering	2	-
	CE3208	Microwave and Control Lab.	-	4
	CE3209	Signal Processing and Digital Communications Lab.	-	4
Level-4/ 1st Semester	CE 4101	Final Year Project I	1	3
	CE 4102	Industrial Management	2	-
	CEO 4103	Information Theory & Coding	3	-
	CEO 4104	Optical Networks I	2	-
	CEO 4105	Satellite Communication	2	-
	CE 4106	Digital Signal Processing I	2	-
	CEO 4107	Data Transmission and Computer Networks	2	-
	CEO 4108	Elective Subject (A)	2	-
	CEO 4109	Digital Signal Processing and Optical Fiber Communication Lab. I	-	6
Level-4/ 2nd Semester	CE 4201	Final Year Project II	1	3
	CE 4202	Operation Research	2	-
	CEO 4203	Mobile Communication Systems	3	-
	CEO 4204	Spread Spectrum	2	-
	CEO 4205	Radar Engineering	2	-
	CE 4206	Digital Signal Processing II	2	-
	CEO 4207	Optical Networks II	2	-
	CEO 4208	Elective Subject (B)	2	-
	CEO 4209	Digital Signal Processing & Optical Fiber Communication Lab. II	-	6

• **Expected learning outcomes of the program**

Knowledge	
Learning Outcome A1	Mastery of Fundamental Principles: Graduates will demonstrate a deep understanding of the fundamental principles and theories.
Learning Outcome A2	Technical Proficiency and Skills: Graduates will possess the technical proficiency and practical skills necessary to design, analyze, and optimize engineering systems and networks.
Learning Outcome A3	Critical Thinking and Problem-Solving Abilities: Graduates will develop strong critical thinking and problem-solving abilities
Learning Outcome A4	Effective Communication and Collaboration: Graduates will exhibit effective communication skills, both orally and in writing.
Skills	
Learning Outcomes B1	Design and Integrate: Graduates will learn to design and build systems and solve related problems.
Learning Outcomes B2	Hands-On Practice: They'll get hands-on experience with tools and techniques used in the field.
Learning Outcomes B3	Troubleshooting Skills: Graduates will develop problem-solving skills to fix issues in communication systems effectively.
Learning Outcomes B4	Teamwork: They'll improve teamwork abilities, vital for collaborating in projects and conveying technical information clearly.
Ethics	
Learning Outcomes C1	Ethical Decision-Making: Graduates will learn to make ethical decisions in their work.
Learning Outcomes C2	Integrity: They'll understand the importance of honesty and professionalism.
Learning Outcomes C3	Social Responsibility: Graduates will recognize their role in benefiting society through their work.
Learning Outcomes C4	Environmental Awareness: They'll be aware of environmental impacts and work towards sustainable practices.

• **Teaching and Learning Strategies**

Lectures: Engaging and interactive lectures will serve as the primary mode of delivering theoretical knowledge, covering fundamental concepts and principles in optical communication engineering.

Exercises: Regular exercises and problem-solving sessions will be integrated into the curriculum to provide students with opportunities to apply theoretical concepts learned in lectures and develop problem-solving skills.

Homework: Homework assignments will be assigned to reinforce learning, encourage independent study, and allow students to practice applying concepts covered in lectures and exercises.

Reports: Students will be required to prepare reports on laboratory experiments, projects, or research findings, fostering skills in data analysis, technical writing, and presentation. These reports will serve as opportunities for students to demonstrate their understanding and communicate their findings effectively.

Laboratory Work: Students will engage in laboratory work to gain practical skills and experience with equipment and tools used in optical communication engineering.

Project-Based Learning: Learning will be centered around real-world projects, allowing students to apply their knowledge and skills to solve practical problems.

Use of Multimedia Resources: Multimedia resources such as videos, simulations, and online tutorials will be utilized to enhance understanding and cater to diverse learning styles.

Continuous Assessment: Assessment will be ongoing and varied, including quizzes, assignments, projects, and exams, to ensure continuous feedback and reinforcement of learning objectives.

- **Evaluation methods**

Quizzes and Tests: Regular quizzes and tests will assess students' understanding of key concepts and topics covered in lectures and readings.

Assignments: Assignments will be given to evaluate students' ability to apply theoretical knowledge to practical problems and scenarios.

Laboratory Performance: Students' performance in laboratory work, including their ability to conduct experiments, analyze data, and demonstrate practical skills, will be assessed.

Projects: Larger-scale projects in the fourth year of the study will assess students' ability to integrate knowledge and skills acquired throughout the program to solve real-world problems or research questions.

Mid-Term Exam: A mid-term exam will be conducted to evaluate students' comprehension of material covered in the first half of the course.

Final Exams: Comprehensive final exams will assess students' overall understanding of the course material and their ability to synthesize and apply concepts learned throughout the program.

• Faculty						
Faculty Members						
Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Professor	✓				2	
Assistant Professor	✓	✓			11	
Lecture	✓	✓			9	
Assistant Lecture	✓	✓			11	
Others						

Professional Development

Mentoring new faculty members

The mentoring process for faculty at our institution and department level is designed to provide support, guidance, and professional development opportunities tailored to the needs of different faculty categories.

For new faculty, a comprehensive orientation program is provided to familiarize them with the institution's policies, procedures, and resources. They are assigned a mentor who assists them in acclimating to their roles, navigating departmental expectations, and developing their teaching, research, and service portfolios. Regular check-ins and feedback sessions are conducted to assess progress and address any challenges or concerns.

Visiting faculty members receive similar support tailored to their specific needs and objectives during their tenure. They are provided with resources and opportunities to engage with the academic community, contribute to departmental initiatives, and enhance their professional skills and networks.

- Full-time faculty members benefit from ongoing mentorship opportunities aimed at supporting their career advancement, scholarly pursuits, and leadership development. They have access to mentoring circles, workshops, and peer collaboration groups to foster interdisciplinary exchange and collaborative research projects.
- Part-time faculty members are integrated into the mentoring process through orientation sessions and ongoing support mechanisms. They receive guidance on navigating the challenges of balancing teaching responsibilities with other professional commitments and are encouraged to participate in professional development activities to enhance their teaching effectiveness and career growth.

Overall, the mentoring process aims to create a supportive and inclusive environment where faculty members can thrive professionally and contribute meaningfully to the academic community. Regular feedback mechanisms and evaluation processes are in place to continuously improve and refine the mentoring program based on faculty feedback and evolving needs.

Professional development of faculty members

The academic and professional development plan for faculty encompasses a range of strategies and arrangements to enhance teaching effectiveness, assess learning outcomes, and support ongoing professional growth.

- **Teaching and Learning Strategies:** Faculty are provided with resources and training on effective teaching strategies, including active learning techniques, technology integration, and student engagement methods. They have access to workshops, seminars, and peer observation opportunities to exchange best practices and refine their teaching approaches.
- **Assessment of Learning Outcomes:** Faculty are involved in the design and implementation of assessment methods to measure student learning outcomes effectively. They receive guidance on aligning course objectives with assessment strategies, developing rubrics, and interpreting assessment data to inform instructional improvements.
- **Professional Development:** Faculty have access to a range of professional development opportunities tailored to their career stage and objectives. This includes workshops on curriculum design, scholarly writing, grant writing, and pedagogical innovation. They are encouraged to pursue advanced degrees, certifications, and participation in conferences to stay current in their field.
- **Research Support:** Faculty receive support and resources to pursue scholarly research and creative activities.
- **Feedback and Evaluation:** Faculty receive regular feedback on their teaching performance through student evaluations, peer reviews, and self-assessment tools. They have opportunities for reflective practice and goal setting to continuously improve their teaching effectiveness and professional growth.
- **Mentoring and Peer Collaboration:** Faculty have access to mentoring programs and peer collaboration groups to support their professional development. They can engage in mentoring relationships with experienced faculty members and collaborate with peers on teaching and research projects.

● Acceptance Criterion

General Conditions of Admission: The student who is accepted the Communication Department must be:

1. Iraqi Nationality.
2. The certificate of the preparatory school certificate supported by a certificate from the Directorate of General Education in the Governorate or equivalent certificate.
3. The student should have been born in 1995 ascent.
4. Successful in the medical examination according to the conditions of each school and the submission of the blind student (which meets the requirements for appropriate humanities) through Central Acceptance.
5. A full-time study and may not be combined at the same time in colleges and institutes. This includes employees of all government institutions and are required to continue their studies to obtain a license leave from their departments starting with the instructions in force and may not be combined. Also, if it is proven otherwise, the Ministry should be informed to cancel his acceptance. The student must postpone the course according to the instructions to meet the requirement to complete two years of service to be entitled to civil leave and in accordance with the instructions for granting a civil leave.
6. Graduated from:
 - The current school year.
 - The previous school year who are not accepted centrally in any college or institute. Their acceptance in accordance with the minimum age for their graduation and if the student is accepted in any college or institute is returned to its original acceptance and is considered a failing year.
7. Non-Iraqi students who have received a middle school certificate and are accepted centrally and notified in written form of the return of the Central Admissions / Expatriates Division to indicate their exemption or claim of foreign currency wages.

● **The most important sources of information about the program**

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- Advance Engineering Mathematics. E. Kreyszing, 9th Edition, 2006.
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- Al–Saeed, Abdul Latif: Simplified Arabic Grammar.
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- K.Ogata "Modern Control Engineering" Prentice – Hall Pub.
- F.Colnaraghi & B.C. Kuo "Automatic Control Systems" ,9–th ed. John Wiley & Sons ,Inc.

• Program Development Plan

The Program Development Plan is like a roadmap for improving an academic program. It involves:

- **Figuring Out What's Needed:** First, we assess what the program does well and where it can improve.
- **Talking to Everyone:** We chat with teachers, students, and industry experts to get their ideas on how to make things better.
- **Updating Courses:** We look at what's being taught and make changes to keep it relevant and up to date with industry standards.
- **Getting Resources:** We make sure we have the right teachers, money, and tools to support these changes.
- **Trying New Ways to Teach:** We explore different teaching methods to make sure students are engaged and learning effectively.
- **Checking How We're Doing:** We regularly check in to see if the changes are working and if students are learning what they need to.
- **Working with Companies:** We team up with businesses to offer students real–world experience and job opportunities.
- **Training Teachers:** We help teachers learn new things too, so they can be better at teaching.
- **Telling People About the Program:** We spread the word about the program to attract more students and make sure people know how great it is.
- **Always Improving:** We keep looking for ways to make the program even better, based on feedback and new ideas.

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2023-2024 / Level 1	CE 1101	Technical English I, Technical English II	Basic	✓	✓			✓	✓			✓			
	CE 1201		Basic												
	CE 1102	Mathematics I, Mathematics II	Basic	✓	✓			✓	✓	✓	✓				
	CE 1202		Basic												
	CE 1103	Computer Science I, Computer Science II	Basic	✓	✓	✓	✓	✓	✓						
	CE 1203		Basic												
	CE 1104	Electronics I, Measurements & Instrumentations	Basic	✓	✓			✓	✓	✓	✓				
	CE 1204		Basic												
	CE 1105	Eng. Drawing, Auto CAD	Basic	✓	✓			✓	✓						
	CE 1205		Basic												
	CE 1106	Digital Techniques, Probability and Statistics, Human Rights	Basic	✓	✓			✓	✓	✓					
	CE 1206		Basic												
	CE 1107	Physics of Semiconductors, Physics of Materials	Basic	✓	✓	✓	✓	✓	✓			✓			
	CE 1207		Basic												
	CE 1108	Electrical Engineering Fundamentals I & II	Basic	✓	✓		✓	✓	✓						
	CE 1208		Basic												
CE 1109	Workshops I&II	Basic	✓	✓			✓	✓	✓	✓					
CE 1209		Basic													
CE 1110	Electrical & Electronic Lab 1& II	Basic	✓	✓			✓	✓	✓	✓					
CE 1210		Basic													
2023-2024 / Level 2	CE 2101	Physics of Optics , Physics of Optical Elements	Basic	✓	✓			✓	✓						
	CE 2201		Basic												
	CE 2102	Mathematics III, Mathematics IV	Basic	✓	✓			✓	✓						

	CE 2202		Basic														
	CE 2103	Electronics , Optical Sensors	Basic	✓	✓	✓	✓	✓	✓								
	CE 2203		Basic														
	CE 2104	Computer Programming, Microprocessor Eng.	Basic	✓	✓	✓		✓	✓								
	CE 2204		Basic														
	CE 2105	Electromagnetic fields I, II	Basic	✓	✓	✓		✓		✓							
	CE 2205		Basic														
	CE 2106	Analog Communication System I&II	Basic	✓	✓	✓	✓	✓	✓								
	CE 2206		Basic														
	CE 2107	Arabic Language & Baath Party Crimes	Basic	✓	✓	✓		✓		✓		✓	✓	✓	✓	✓	✓
	CE 2207		Basic														
	CE 2108	Transmission Lines & Electronics Communication	Basic	✓	✓	✓		✓	✓								
	CE 2208		Basic														
	CE 2109	Analog Communication and Electronics Lab1 & Lab 2	Basic	✓	✓	✓		✓		✓							
	CE 2209		Basic														
2023-2024 / Level 3	CE 3101	Numerical Analysis I & II	Basic	✓	✓	✓	✓	✓	✓								
	CE 3201		Basic														
	CE 3102	Engineering Analysis I&II	Basic	✓	✓	✓		✓	✓								
	CE 3202		Basic														
	CE 3103	Control Engineering I&II	Basic	✓	✓	✓		✓		✓							
	CE 3203		Basic														
	CE 3104	Digital Communication I&II	Basic	✓	✓	✓	✓	✓	✓								
	CE 3204		Basic														
	CE 3105	Optical Fiber Communication I &II	Basic	✓	✓	✓		✓	✓								
	CE 3205		Basic														
	CE 3106	Signals & Systems I & II	Basic	✓	✓	✓		✓		✓							
	CE 3206		Basic														
	CE 3107	Antenna Theory and Propagation & Microwave Engineering	Basic	✓	✓	✓	✓	✓	✓								
	CE 3207		Basic														

	CE 3108	Antenna & Control Lab.&	Basic	✓	✓	✓		✓	✓						
	CE 3208	Microwave and Control Lab.	Basic												
	CE 3109	Microprocessor and digital Communication Lab.	Basic	✓	✓	✓		✓		✓					
	CE 3209	Signal Processing and Digital Communication Lab.	Basic	✓	✓	✓		✓		✓					
2023-2024 / Level 4	CE 4101	Final year Project I	Basic	✓	✓	✓	✓	✓	✓	✓					
	CE 4201	Final year Project II	Basic												
	CE 4102	Industrial Managements	Basic	✓	✓			✓	✓						
	CE 4202	Operation Research	Basic	✓		✓		✓	✓						
	CE 4103	Information Theory & Coding	Basic	✓	✓	✓		✓							
	CE 4203	Mobile Communications systems	Basic	✓	✓	✓		✓	✓	✓					
	CE 4104	Optical Networks I &	Basic	✓	✓	✓	✓	✓	✓	✓	✓				
	CE 4204	Spread Spectrum	Basic	✓		✓		✓							
	CE 4105	Satellite communication &	Basic	✓		✓	✓	✓		✓	✓				
	CE 4205	Radar Engineering	Basic	✓		✓	✓	✓		✓	✓				
	CE 4106	Digital single processing I&	Basic	✓	✓	✓		✓	✓						
	CE 4206	Digital single processing II	Basic	✓	✓	✓		✓	✓						
	CE 4107	Data transmissions& computer networks	Basic	✓		✓	✓	✓	✓						
	CE 4207	Optical Networks II	Basic	✓	✓	✓		✓	✓	✓	✓				
CE 4108	Elective subject (A)	Basic													
CE 4208	Elective subject (B)	Basic													

***Please tick the boxes corresponding to the individual program learning outcomes under evaluation**

