



Annual Program Report

— (Bachelor)

Program: **Bachelor in Computer Science**

Program Code (as per Saudi Standard Classification of Educational Levels and Specializations): **061301**

Qualification Level: **Bachelor (6th level according to latest NQF)**

Department: **Computer Science**

College: **Engineering and Computer Science**

Institution: **Jazan University**

Academic Year: **2023-2024**

Main Location: **Department of Computer Science, Jazan University**

Branches offering the program (if any): None

Table of Contents

A. Program Statistics	3
B. Program Assessment.....	3
1. Program Learning Outcomes Assessment and analysis according to PLOs assessment plan *	3
2. Evaluation of Courses	5
3. Students Evaluation of Program Quality	7
4. Scientific research and innovation during the reporting year	8
5. Community Partnership	8
6. Other Evaluation (if any)	10
C. Program Key Performance Indicators (KPIs).....	13
D. Challenges and difficulties encountered by the program (if any)	15
E. Program development Plan.....	16
F. Approval of Annual Program Report.....	20



A. Program Statistics

Item	Number
Number of students enrolled in the program	314+532=846
Number of students who started the program (in reporting year)	98+101=199
Number of students who completed the program	13+33=46

B. Program Assessment

1. Program Learning Outcomes Assessment and analysis according to PLOs assessment plan *

#	Program Learning Outcomes	Assessment Methods (Direct and Indirect)	Targeted Performance (%)	Assessment Results	
				Direct	Indirect
Knowledge and Understanding					
K1	Describe the sound knowledge of principles of Computing, Science and Mathematics required in the field of Computer Science.	Exams, Assignments & Surveys	80	71.99	83.8
K2	Relate recent trends and current research in the field of Computer Science.	Assignments, Mini Project, Case Studies & Surveys	80	78.05	84.3
Skills					
S1	Analyze complex computing problems to apply principles of computing and other relevant disciplines to identify solutions.	Exams, Assignments, Laboratory Exercises, Lab Exams, Final Project & Surveys	80	74.95	81.4
S2	Evaluate problem-solving strategies to propose a large number of solutions and come up with the best possible solution.	Laboratory Exercises, Lab Exams, Case Studies, Mini Project & Surveys	80	75.2	83.2
S3	Design and implement computing-based solutions to meet a given set of computing requirements in the context of the program’s discipline.	Laboratory Exercises, Lab Exams, Case Studies, Mini Project & Surveys	80	83.96	80.7
S4	Apply computer science theory and software	Laboratory Exercises, Lab	80	72.15	84.9





	development fundamentals to produce computing-based solutions.	Exams, Case Studies, Mini Projects, Exam, Field Training Assessment & Surveys			
S5	Communicate effectively in a variety of professional contexts for technical and non-technical audiences.	Mini Project Presentation, Final Projects Defense Viva & presentation, & Surveys	80	88.5	84.1
Values, autonomy, and responsibility					
V1	Recognize professional and social responsibilities to make informed judgments in computing practices based on legal and ethical principles.	Field Training Assessment, Community Services Participation & Surveys	80	78.10	84.3
V2	Demonstrate the ability to function effectively as a member or leader of a team engaged in activities appropriate to the field of Computer Science.	Group Assignments, Mini Projects & Surveys	80	81.98	83.9
V3	Identify the need for and an ability to engage in continuing professional development and entrepreneurship.	Observations, and judgments about technology views, Mini-Project Presentation & Surveys	80	90.21	84

*Attach a separate report on the program learning outcomes assessment results for male and female sections and each branch (if any).

Strengths:

Students have demonstrated a satisfactory level of proficiency in key areas such as evaluation, problem-solving, professional communication, and designing and implementing computing solutions for complex challenges. Additionally, they have shown strong teamwork skills, effectively collaborating while applying legal and ethical principles to resolve issues.

Some PLOs showed lower results in direct assessments compared to indirect assessments. This might be because the PLOs were calculated using courses from the new curriculum. There may be improvements in the future, as the courses are designed to align with new market trends and job requirements.





Aspects that need improvement with priorities:

The achievement of students' learning outcomes, as measured through direct assessments, is satisfactory across most learning domains, though some discrepancies have been noted in the results from indirect assessments. Key areas needing attention include students' knowledge of computing and mathematics, awareness of emerging trends, ability to apply computing to create effective solutions, understanding of professional and social responsibilities, commitment to continuous professional development, and entrepreneurship skills.

- PLOs K1 and S4 performed slightly below the target; however, the overall performance was impressive. This observation is based on the first-time implementation of the new curriculum study plan, as the students have only just reached their final year. Therefore, drawing a definitive conclusion at this stage may not be appropriate.
- Special attention should be given to Mathematics, Physics, and English courses, as many students are struggling with these subjects, which are foundational for academic and professional success.
- Students' communication and programming abilities need to be improved to align with industry standards, ensuring they are well-prepared for real-world challenges.
- Graduating students must gain a solid understanding of practical knowledge, technological trends, and current research areas to remain competitive and adaptable in their careers.
- Workshops, seminars, and training programs should be held to strengthen students' soft skills, enhance their learning abilities, and improve their career prospects.

2. Students Evaluation of Courses

Course Code	Course Title	Number of Students Who Evaluated the Course	Percentage of Participants	Evaluation Results	Developmental Recommendations
COMP 111	Introduction to Computing	494	77.31%	4.03	First Semester
COMP 112	Programming 1	408	40.56%	4.36	Second Semester
COMP 213	Programming 2	54	25.71%	4.54	First Semester
COMP 214	Object Oriented Programming	269	65.13%	4.26	Second Semester
COMP 315	Web Programming	126	77.78%	4.31	Second Semester
COMP 316	Principles of Programming Languages	236	82.52%	4.03	Second Semester





Course Code	Course Title	Number of Students Who Evaluated the Course	Percentage of Participants	Evaluation Results	Developmental Recommendations
COMP 417	Enterprise Application Development	124	75.15%	4.28	Second Semester
COMP 321	Data Structures and Algorithms	148	53.24%	4.43	Second Semester
COMP 322	Design & Analysis of Algorithm	111	84.1%	4.08	Second Semester
COMP 323	Computer Security and Privacy	99	83.19%	4.37	Second Semester
COMP 324	Graph Theory & Applications	73	87.95%	4.34	Second Semester
COMP 525	Cryptography	10	66.67	4.51	Third Semester
COMP 333	Operating Systems	208	74.14	4.36	Second Semester
COMP 231	Digital Design	54	75	3.98	Second Semester
COMP 332	Computer Architecture	133	78.24	4.11	Second Semester
COMP 434	Parallel and Distributed Computing	132	84.08%	4.40	First Semester
COMP 441	Artificial Intelligence	127	79.87%	4.21	First Semester
COMP 452	Cloud Computing	123	63.1	4.06	Second Semester
COMP 451	Data Modelling and Simulation	97	69.29	4.43	Third Semester
COMP 453	Data Science	122	83.56	4.37	First Semester
COMP 454	Data Mining	155	81.58	4.04	Second Semester
COMP 555	Mobile Computing	24	92.31	4.21	Third Semester
COMP 461	Computer Graphics	117	76.47	3.97	Third Semester
COMP 371	Software Engineering	93	76.86	4.32	Second Semester
COMP 472	Software Project Management	116	77.33	3.75	Third Semester
COMP 473	Software Requirements Engineering	11	73.33	4.84	Third Semester



Course Code	Course Title	Number of Students Who Evaluated the Course	Percentage of Participants	Evaluation Results	Developmental Recommendations
COMP 574	Software Architecture & Design	8	88.89	4.81	Third Semester
COMP 582	Graduation Project Phase - 1	11	91.67	4.32	Third Semester
COMP 593	Seminar	26	92.86	4.2	Third Semester
COMP 591	Computer and Professional Ethics	10	90.91	4.39	Third Semester

3. Students' Evaluation of Program Quality

Evaluation Date: March 2024	Number of Participants: 45
Students Feedback	Program Response
<p>Strengths:</p> <ul style="list-style-type: none"> Faculty were available for guidance and advice when I needed to speak to them. The field training programs (or internship year) were effective in developing my skills.) The program has helped me develop sufficient interest in seeking to keep my knowledge updated as new in my field of study. The program has developed my ability to work effectively with groups. I am fully aware of the vision, mission and objectives of the program. 	<ul style="list-style-type: none"> Students are always encouraged to participate in the evaluation of program quality.
<p>Areas of Improvement:</p> <ul style="list-style-type: none"> Library resources were convenient and available whenever I needed them. Appropriate equipment is available for extracurricular activities (including sports and recreation). 	<ul style="list-style-type: none"> The program established the committee of students' activities and events to increase the number of activities in all branches.
<p>Suggestions for improvement:</p> <ul style="list-style-type: none"> The computer equipment was sufficient for my needs. I am satisfied with the performance of the administrative staff in the college and the university in general. 	<ul style="list-style-type: none"> Students' suggestions will be taken into account in the next year improvement plan.

4. Scientific research and innovation during the reporting year

Activities Implemented	Number
Published scientific research	236 + 146 = 382
Current research projects	7
conferences organized by the program	0
Seminars held by the program	6
Conferences attendees	66 + 27 = 93
Seminars attendees	129

Discussion and analysis of scientific research and innovation activities:

- Faculty members are encouraged to align their research with national priorities, emphasizing areas such as health and wellness, sustainable environments, essential needs, energy and industrial leadership, and the future of economics.
- Faculty have demonstrated a strong commitment to scholarship by publishing extensively in prestigious international journals and conferences.
- Students, particularly those engaged in research-based graduation projects, should be encouraged and motivated to participate in research activities to enhance the quality of their publications.
- New faculty members are urged to establish and actively engage in research initiatives.
- Faculty across both campuses should increase their focus on research publications and related activities.
- Faculty are encouraged to take advantage of funding opportunities from Jazan University and external grants to support their ongoing research projects.

5. Community Partnership

Activities Implemented	Brief Description*
Education Campaign: Awareness program for school students on social media	Topic: برنامج توعوي لطلبة المدارس على مواقع التواصل الاجتماعي No. of Participants: 47 Date: 05-12-2023 Presented by: سميته شيخ عبدالواحد شيخ, سانجتي كوماندر كوماندو Organized by: Community service committee Location: مدرسة امجاد المستقبل بجازان
Hands on Training: Course in software skills	Topic: Excel دورة في مهارات برنامج No. of Participants: 20 Date: 26-12-2023 Presented by: د ولاء محمد عبدالحفيظ حسين Organized by: Community service committee Location: Zoom Link
Hands on Training	Topic: CANAVA اساسيات التصميم باستخدام No. of Participants: 21 Date: 01-01-2024 Presented by: /ا وفاء حكيم ابوشملة Organized by: Community service committee



	Location: الثانوية الخامسة بجازان
Hands on Training	Topic: برنامج تدريبي لطلبة المدارس على لغة البايثون No. of Participants: 29 Date: 17-01-2024 Presented by: مها الشعبي / Organized by: Community service committee Location: الثانوية الخامسة بجازان
Education Campaign: Cyber Security Awareness Exhibition	Topic: معرض التوعية بالأمن السيبراني No. of Participants: +230 Date: 18-01-2024 Presented by: / منال حسن زكري وطلاب نادي الحاسب Organized by: Community service committee and computer club Location: الراشد مول بوابة رقم 5
Special Lecturer: Cybersecurity in Saudi Vision 2030	Topic: الأمن السيبراني في رؤية المملكة ٢٠٣٠ No. of Participants: 14 Date: 6-3-2024 Presented by: / شوق محمد ربيعان القحطاني Organized by: Community service committee Location: الثانوية الخامسة
Special Lecturer	Topic: علم البيانات والذكاء الاصطناعي No. of Participants: 53 Date: 6-3-2024 Presented by: / عائشة مشيب محمد القحطاني Organized by: Community service committee Location: مدرسة المتوسطة الرابعة بجازان – مخطط خمسة
Hands on Training	Topic: اساسيات برنامج الورد No. of Participants: 23 Date: 7-3-2024 Presented by: نجلاء محمد قلم Organized by: Community service committee Location: ثانوية صبيا الأولى بصبيا
Hands on Training	Topic: دورة في برنامج البوربوينت No. of Participants: 23 Date: : 10 -3-2024 Presented by: د/ سحر محمد عبد العظيم الديب ولاء عيد الله سهلي و مرام يحيى كليبي وزهراء احمد حكيم والطالبات: Organized by: Community service committee Location: الثانوية الخامسة
Education Campaign: Guidance program for computer and engineering majors	Topic: برنامج ارشادي لتخصصات الحاسب والهندسة No. of Participants: 111 Presented by: د/ سحر محمد عبد العظيم الديب ولاء عيد الله سهلي و مرام يحيى كليبي وزهراء احمد حكيم والطالبات: Organized by: Community service committee Location: الثانوية الخامسة
Special Lecturer	Topic: الحاسب والبرمجة No. of Participants: 33 Date: 15-5-2024 Presented by: / أثير عمر باجنيد



Organized by: Community service committee
Location: إبتدائية ومتوسطة قامره

*including timing of implementation, number of participants, and outcomes.

Comment on community partnership activities**

Actively encourage female faculty to participate in social activities, bringing diverse perspectives to our community initiatives.

Encourage faculty to engage in community service outside campus, allowing them to apply their expertise and positively impact the local community.

There is a significant need to expand the number of community partnership activities. Additionally, it is essential to establish partnerships with various organizations to enhance community service efforts within society.

**including overall evaluation of the program's performance in these activities (if any).

6. Other Evaluation (if any)

(e.g., independent reviewer, program advisory committee, and stakeholders (e.g., faculty members, alumni, and employers))

Evaluation method: Expert Feedback	Date: May 2024	Number of Participants: 5
Summary of Evaluator Review	Program Response	
<p>Strengths:</p> <ul style="list-style-type: none"> The BCS program is well-structured, featuring relevant courses that align with industry and academic standards, earning praise from experts. Several experts, found no need for major changes, indicating that the core of the curriculum is solid and meets academic and professional expectations. The program is recognized for being up-to-date with other computer science programs in the region, particularly in addressing the pre-requisites, co-requisites, and credit hour allocation of courses. 	Curriculum committee will continue to build on this strength by ensuring that course content remains relevant and effective in meeting the needs of our students and the industry.	
<p>Points for Improvements:</p> <ul style="list-style-type: none"> Suggested reductions in the 6-credit hours for English to enhance technical electives like AI or Data Science. Recommendations to increase focus on topics such as quantum computing, blockchain, and ethical AI. Consider extending the duration or credit hours for Cooperative Training for deeper real-world experience. 	Program acknowledge the importance of integrating more emerging technologies into our curriculum. Our study plan currently includes a course titled "Selected Topics," which allows for the inclusion of the latest technologies and subjects.	
<p>Suggestions for development:</p> <ul style="list-style-type: none"> Revisit the pre-requisite structure for courses like COMP371 and COMP582 and consider modifying the 	Any recommendations regarding course prerequisites and credit hour adjustments	





credit hour allocations for courses like COMP582, COMP583, and COMP593.

- Evaluate the feasibility of extending the duration of Cooperative Training to provide students with more real-world experience, especially in high-demand areas like AI and systems analysis.
- Incorporate more elective courses or special topics in areas like quantum computing, blockchain, and ethical AI, as suggested by experts, to give students exposure to the latest technologies.

will be carefully reviewed and discussed with faculty and academic committees to ensure alignment with our educational objectives.

*Attach independent reviewer's report and stakeholders' survey reports (if any). [Expert review](#)

Evaluation method: Faculty Feedback	Date: May 2023	Number of Participants: 52
Summary of Evaluator Review	Program Response	
<p>Strengths:</p> <ul style="list-style-type: none"> • Many courses have relevant content that aligns with industry requirements, which helps students prepare for the job market effectively. • Most courses utilize suitable assessment methods that accurately evaluate student understanding and skills, fostering a positive learning environment. • For many courses, lab manuals cover theoretical concepts, providing a practical approach to learning. • Few courses align with relevant certification programs that enhance students' employability, such as Oracle, AWS or Microsoft certifications. 	<p>The curriculum has been updated to align with the current demands of the IT industry and the broader job market.</p>	
<p>Points for Improvements:</p> <ul style="list-style-type: none"> • Some courses contain lengthy and unorganized content, making it challenging for students to grasp essential concepts efficiently. • Some courses could benefit from diverse and engaging assessment methods beyond traditional midterms and final exams. • A number of lab manuals do not sufficiently cover practical aspects or fail to align with theory, necessitating revisions. 	<p>The IT department should be responsible for updating and maintaining the labs.</p>	
<p>Suggestions for development:</p> <ul style="list-style-type: none"> • Regularly review and update textbooks and learning materials to ensure relevance and accuracy in line with current industry practices. • Update lab manuals to include relevant exercises that directly relate to theoretical concepts and enhance practical learning. 	<p>The curriculum committee is committed to regularly updating textbooks, lab manuals, and materials to align with current industry standards.</p>	





- Ensure that all necessary software tools are installed and available in labs to provide students with hands-on experience in using industry-standard technologies.
- Conduct regular benchmarking against similar courses offered at nationally or internationally accredited universities to identify best practices and areas for improvement.

The department will regularly benchmark against accredited universities to enhance course content and teaching methods.

*Attach independent reviewer's report and stakeholders' survey reports (if any). [Faculty Review](#)



C. Program Key Performance Indicators (KPIs)

Including the key performance indicators required by the NCAAA.

No	KPI	Targeted Value	Actual Value	Internal Benchmark	Analysis	New Target
1	Students' Evaluation of Quality of learning experience in the program	4.25	4.04	4.24	Negative The program needs to conduct a campaign to spread awareness about the learning resources and facilities offered to students and promote the latest tools and technologies available in laboratories.	4.25
2	Students' evaluation of the quality of the courses	4.25	4.30	4.28	Positive Target achieved	4.30
3	Completion rate	40%	26.03%		Negative The completion rate needs an immediate action to be taken to improve the annual completion, passing percentage, and retention rate.	40%
4	First-year students' retention rate	90%	91.54%	89.08%	Negative Increase insight into resources such as tutoring, academic advising, or student clubs to improve this KPI.	95%
5	Students' performance in the professional and/or national examinations	NA	Not Applicable		NA	NA
6	Graduates' employability and enrolment in postgraduate programs	50%	53%		Positive This KPI has improved	50%
7	Employers' evaluation of the program graduates' proficiency	4.25	4.2		Positive The positive trend is a reflection of a comprehensive approach that emphasizes aligning with industry needs,	4.25



					developing soft skills, building strong partnerships, and continuous improvement.	
8	Ratio of students to teaching staff	25:1	29:1	27.98:1	Negative The program needs to more Professor and Associate professors.	25:1
9	Percentage of publications of faculty members	80%	84%	73%	Positive The number of publications has increased tremendously.	85%
10	Rate of published research per faculty member	3:1	3.67	1.83	Positive The rate of publication per faculty member has been improved.	3.75:1
11	Citations rate in refereed journals per faculty member	15:1	15.76	32.05%	Positive The cumulative effects of being cited in subsequent research can greatly increase the citation rate.	15:1

Program Key Performance Indicators (KPIs)

Including the key performance indicators required by the NCAAA.

No	SKPI	Targeted Value	Actual Value	Analysis	New Target
1	Students trained in national and international certifications.	50%	17.5%	Need improvement	50%
2	Number of mini projects presented.	15	13	Satisfactory, positive trend	15
3	The average number of professional development activities completed by the faculty (DAD/QAU / others)	30%	48.5%	Positive trend	50%
4	Students attended technical competitions, workshops, seminars, and conferences.	10	16	Positive trend	10
5	The number of specialized training programs conducted for the community towards ICT.	15	14	Satisfactory, positive trend	15
6	The number of motivational talks/seminars towards lifelong learning & entrepreneurship.	50%	48.35%	Positive trend	50%

Comments on the Program KPIs and Benchmarks results:

- The completion rate for both campuses is low and immediate action needs to be taken to improve the annual completion, passing percentage, and retention rate.
- Prioritize hiring more Assistant Professors and Associate Professors to improve the distribution of teaching loads and provide personalized student support.
- The overall performance of this KPI has improved, indicating that both campus teaching staff are actively involved in research and publications.

D. Challenges and difficulties encountered by the program (if any)

Teaching	Limited opportunities for integrating innovative teaching approaches or technology-enhanced learning tools.
Assessment	
Guidance and counseling	Insufficient availability of career and academic counseling services, resulting in a lack of personalized support for students. High student-to-counselor ratio, limiting timely and effective guidance for academic and personal challenges. Lack of proactive mental health resources, which impacts student well-being and performance.
Learning Resources	Limited usage of digital resources or e-learning platforms, affecting students' ability to learn independently.
Faculty	
Research Activities	Limited exposure for students to research activities, impacting their critical thinking and problem-solving skills.
Others	Limited opportunities for internships, industry placements, and hands-on experiences, affecting students' readiness for the job market.

E. Program Development Plan

No.	Priorities for Improvement	Actions	Action Responsibility
1	Review and update the courses regularly based on recent trends.	Identify the recent trends in the respective courses with the help of the course coordinator & track leader. Update the courses if needed.	Curriculum & Teaching Committee
2	Skilled courses in computing and software tools	Identify skilled courses. Conduct workshops. Collect feedback from participants.	Professional Development Committee
3	Enhance and Strengthen the Teaching methodologies of the faculties	Frequently conduct training/ workshops/ seminars on teaching methodologies.	Learning Outcomes committee
4	Update the Labs with the latest hardware and software tools as per the industry requirement	Request the software needed before the beginning of the semester.	Lab Committee / Curriculum and Teaching Committee
5	Conduct review / Survey from stakeholders periodically	Conduct surveys with the stakeholders at regular intervals.	Statistical Survey Unit / Curriculum & Teaching Committee
6	Proactively engage Alumni for their feedback concerning current market needs in curriculum development	Identify alumni working in the industries. Obtain feedback from alumni/employers Conduct meeting	Alumni Unit/ Statistical Survey Unit / Curriculum & Teaching Committee
7	Organize exhibitions to showcase the mini-projects and graduation projects	Organize exhibitions to showcase the graduation projects & mini projects.	Graduation Project Committee / Students Activities Committee
8	Conduct training programs and prepare them for national and international certifications.	Sign MoU with various agencies offering advanced training programs like (AWS, CLOUD, etc)	Professional Development Committee
9	Provide training opportunities for students with the industry in the technical field	Identify the technical needs of the industry. Provide training opportunities.	Professional Development Committee



10	Motivate students to participate in technical competitions, workshops, seminars and conferences	Conduct technical competitions, conferences, symposiums for the students.	Professional Development Committee
11	Invite alumni as speakers to motivate the students to know the current job market	Collect the list of alumni Maintain the database Establish a relationship with them and invite them as speakers	Alumni Unit/ Professional Development Committee
12	Research and Innovation seminars	Identify various research topics. Conduct research and innovation seminars	Research & Innovation Committee
13	Research Collaboration-Nurture an Inter/Multidisciplinary research culture and productivity	Identify various research areas. Encourage faculties to work across multiple disciplines. Collaborate research in a multidisciplinary environment	Research & Innovation Committee
14	Research Groups Initiative Well-functioning research groups with high production based on the specialization	Identify faculty specialization and create groups. Research group activities.	Research & Innovation Committee
15	Involve students in research and publish papers along with the faculty.	Identify & encourage students to publish papers.	Research Committee/ Graduation Project Committee
16	Reward the innovative ideas and publications in the field of research and developments	Reward the faculties who published papers in reputed journals.	Research & Innovation Committee
17	Encourage faculty publications in research journals and conferences.	Identify the reputed journals/conferences and encourage faculty to submit papers.	Research & Innovation Committee
18	Encourage faculty members to be involved in collaborative research projects using the	Identify the local research projects. Guide the faculty members in applying for research projects.	Research & Innovation Committee

	provision offered by various funding agencies. (KAUST projects, Deanship of Scientific Research Funds & King Abdul Aziz city)-		
19	Provide training programs for institutions, government, and educational agencies	Identify the various training for the community. Involve both faculty and students to provide specialized training for the society.	Cooperative & Training Committee
20	Conduct an awareness program for society with the help of stakeholders	Identify the areas in which society needs awareness. Conduct regular awareness programs.	Cooperative & Training Committee
21	Seminars and Community Courses	Identify the various IT tools for solving community needs. Encourage students' participation. Guide them in undertaking projects to solve community needs.	Cooperative & Training Committee
22	Course Projects in Community Service	Encourage students to carry out the community-based project to society. Identify community-based projects and guide them.	Graduation Project Committee
23	Participate in cultural and community events.	Conduct frequent cultural and community events for the society.	Cooperative & Training Committee
24	Enhance the contributions of students & faculty members in community service activities	Motivate the students and faculty to actively involved in community services.	Cooperative & Training Committee
25	Organize special awareness and training for students in entrepreneurship skills and motivate students to be Entrepreneurs.	Identify the training programs providing entrepreneurship training. Identify speakers. Invite faculty & students to participate.	Cooperative & Training Committee



26	Cooperative training agreements for students with vital authorities in the technical field.	Identify the various training industries. Identify vital authorities in the technical fields.	Cooperative & Training Committee
27	Invite alumni who are experts in the field to share their success stories.	Identify the distinguished alumni. Invite them to share their success to motivate students.	Alumni Unit
28	Conduct regular personality and interpersonal training programs for the professional success of the students in the global market.	Identify the interpersonal training programs.	Professional Development Committee

Courses Improvement Plan

Course	Priorities for Improvement	Actions	Action Responsibility
DS (COMP 321)	Allocated enough time to cover the topics effectively.	The course content should be reviewed, and course roadmap needs to be designed to allocate sufficient time for effectively covering each topic.	Course coordinator, Course teachers
Software Engineering (COMP 371)	Revise course materials.	Discussion on incorporating additional topics related to Software Development Process	Course coordinator
PPL (COMP 316)	Update course material	Discussion of adding some mores topic on programming concept .	Course coordinator
Computer Architecture (COMP 332)	Some students struggled with understanding in the topics like evolution of computers and technologies involved, relate various components, functions and interconnection structure and I/O module techniques of a	More time should be allocated to these topics in the course RoadMap.	Course teachers





	computer system, which impacted overall comprehension		
Theory of computation (COMP 535)	Introduce interactive learning activities, such as in-class exercises and group discussions on problem-solving with automata and formal language topics.	Implemented in-class exercises, problem-solving sessions, and small group discussions where students could work on automata design and language recognition problems collaboratively.	Course coordinator, Course teachers
Cloud Computing (452)	Assign research projects on emerging cloud technologies	Encouraged students to present on new trends in cloud computing	Course coordinator, Course teachers
Digital Design (COMP 231)	Many faculties are suggesting to reduced few more topics from chapter-1 specially.	Have discussion with some senior subject members and are in consideration.	Course Coordinator
Web Programming (COMP 315)	Mini Projects	Give extra office hours to guide and help students in their Mini Projects to get good knowledge of the course.	Course Teachers

- Attach any unachieved improvement plans from the previous report.
- The annual program report needs to be discussed in the department council

F. Approval of Annual Program Report

COUNCIL / COMMITTEE	DEPARTMENT COUNCIL
REFERENCE NO.	ENGCS2407
DATE:	10/10/2024

