

وزارة التعليم العالي والبحث العلمي
جهاز الإشراف والتقويم العلمي
دائرة ضمان الجودة والاعتماد الأكاديمي

استمارة وصف البرنامج الأكاديمي للكليات للعام الدراسي ٢٠٢١ - ٢٠٢٢

اسم الجامعة : الجامعة التقنية الجنوبية

اسم الكلية: المعهد التقني / القرنة

القسم العلمي : تقنيات أنظمة الحاسوب

تاريخ ملء الملف :

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التاريخ: ٢٠٢٢ / ٩ / ٢٦

التوقيع: 

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التاريخ: ٢٠٢٢ / ٩ / ٢٦

التوقيع: 

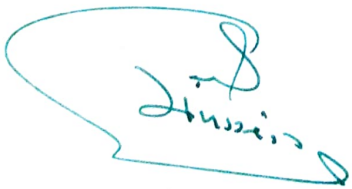
دقق الملف من قبل

قسم ضمان الجودة والأداء الجامعي

اسم مدير قسم ضمان الجودة والأداء الجامعي:

التاريخ: ٢٠٢٢ / ٩ / ٢٦

التوقيع: 



مصادقة السيد العميد

TEMPLATE FOR PROGRAMME SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

PROGRAMME SPECIFICATION

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the program

1. Teaching Institution	
2. University Department/Centre	Qurna Technical Institute
3. Program Title	Department of Computer Systems Techniques
4. Title of Final Award	Diploma
5. Modes of Attendance offered	yearly
6. Accreditation	(AACSB) Association Collegiate School of Business
7. Other external influences	Training Tournament ,scientific Visits,Vocational training
8. Date of production/revision of this specification	\ \2022
9. Aims of the Program	
1- Teaching the student how to represent data in computer memory	
2- Teaching the student the space & time complexity, its components and methods of calculating them	
3- Teaching the student the static and dynamic techniques to reserve memory locations	
4- Teaching the student how to deal with the matrix, write the programs related to it, and reserve the matrix with run & compiler time	
5- Teaching the student the structures of the moving data linear link list and its types and programming the algorithms of addition, deletion and search	
6- Teaching the student non-linear hyperdata structures (tree), their installation and programming	

10. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Knowledge and Understanding

A1- Enable the student to know the basics of the work of data structures.

A2- Enable the student to know and understand the functions of data structures.

A3- Enabling the student to learn data programming with multiple and different structures

B. Subject-specific skills

B1 - To provide the student with the skills to deal with different data structures

B2 - To provide the student with skills in how to build a program with less space and implementation time

B 3 - Working on the Windows operating system and its ready and virtual programs, such as using Microsoft Office programs and design programs such as Photo Shop Adobe.

B4- Installing and maintaining various computers, diagnosing common faults, configuring and installing drivers, maintenance and anti-virus programs.

B 5- Dealing with databases and forms and programming them in VFP.

B6 - Managing the general operating systems on electronic computers to obtain the best operating performance.

B7 - Training on systems analysis and design using a set of analysis and design tools.

B8 - Programming databases using MYSQL and V.B. using a set of tools and tools for tables and creation of reports.

B 9- Programming and managing Internet pages, designing websites, downloading and dealing with different servers and languages used on Internet networks. Through programming languages such as HTML, JAVASCRIPT, PHP and others.

B 10- Connecting local networks and different types of network connections.

Teaching and Learning Methods

The method of delivering a lecture through the use of e-learning by presenting theoretical and practical lessons on display screens using PPT. According to the available capabilities, cooperative learning (acrobat), laboratory, summer training

Assessment methods

Quick Daily Quizzes, Daily Assessment, Quarterly Exams, Final Exams

C. Thinking Skills

C1- Receiving information about data structures smoothly

C2 - Respond to the amount of new information about data structures

C 3- Value judgment

C4- Evaluation of the students during the daily lecture

Teaching and Learning Methods

The method of delivering a lecture through the use of e-learning by presenting theoretical and practical lessons on display screens using PPt. According to the available capabilities, cooperative learning (acrobats), laboratory, summer training, providing students with the basics and additional topics related to previous educational outcomes of skills to solve practical problems, applying the theoretically studied topics on a practical level in various computer technologies.

Assessment methods

Quick Daily Quizzes, Daily Assessment, Quarterly Exams, Final Exams

D 1- Self-learning skills

D 2- Teamwork skills

D 3- Communication skills

D 4- Report writing skills

Teaching and Learning Methods

- Developing educational curricula in coordination with the Sectoral Committee for Curriculum Development in Iraq.

- Using curricula and programs available on the Internet for self-development.

Training students in various state institutions and the private sector.

Participation in training courses held by institutes of computer and software technologies, whether in the public or private sectors.

Self-learning by passing the exams of companies interested in office software and other software, such as Microsoft and others.

Assessment Methods

Daily exams with home questions to solve by yourself.

Passing the tests available on the Internet, such as Microsoft and Oracle, and in various available software

قسم أنظمة الحاسوب/السنة الأولى- الفصل الاول

ت	اسم المادة باللغة العربية	عدد الساعات			عدد	نوع المادة	لغة التدريس
		ن	ع	م			
١	C البرمجة بلغة ++	٢	٢	٤	٤	تخصصية	الإنكليزية
٢	خوارزميات وحل المشكلة	٢	٠	٢	٢	تخصصية	
٣	التصميم المنطقي	٢	٢	٤	٤	تخصصية	الإنكليزية
٤	اساسيات الحاسوب	٠	٢	٢	٢	تخصصية	
٥	حقوق الانسان والديمقراطية	٢	٠	٢	٢	عامة	
٦	رياضيات وتحليل عددي	٢	٢	٤	٤	مساعدة	الإنكليزية
	المجموع	١٠	٨	١٨	١٨		

قسم أنظمة الحاسوب/السنة الأولى- الفصل الثاني

ت	اسم المادة باللغة العربية	عدد الساعات			عدد	نوع المادة	لغة التدريس
		ن	ع	م			
١	C البرمجة بلغة ++	٢	٢	٤	٤	تخصصية	الإنكليزية
٢	اساسيات تصميم المواقع	٢	٢	٤	٤	تخصصية	الانكليزية
٣	صيانة الحاسوب	٢	٢	٤	٤	تخصصية	
٤	الاحصاء المتقدم	٢	٢	٤	٤	مساعدة	
٥	البرمجة بلغة بايثون	٢	٢	٤	٤	تخصصية	الانكليزية
٦	اللغة الانكليزية	٢	٠	٢	٢	مساعدة	الإنكليزية
	المجموع	١٢	١٠	٢٢	٢٢		

قسم أنظمة الحاسوب/السنة الثانية

ت	المادة	عدد الساعات			مجموع	نوع المادة	لغة التدريس
		ن	ع	م			
١	هياكل البيانات	٢	٣	٥	١٠	تخصصية	الإنكليزية
٢	قواعد البيانات	٢	٣	٥	١٠	تخصصية	الإنكليزية
٣	أنظمة التشغيل	٢	٢	٤	٨	تخصصية	
٤	تحليل نظم	١	٢	٣	٦	تخصصية	
٥	البرمجة بلغة V.Basic	٢	٣	٥	١٠	تخصصية	
٦	شبكات	١	٢	٣	٦	تخصصية	الإنكليزية
٧	تصميم المواقع الالكترونية	١	٢	٣	٦	مساعدة	
٨	مشروع	١	٢	٣	١	تخصصية	
٩	اللغة الانكليزية	٢	٠	٢	٢	مساعدة	
	المجموع	١٤	١٩	٣٨	٥٩		

Level/Year	Course or Module Code	Course or Module Title	Credit rating	
Year		Data Structure		Bachel or Degree Requir es (x) credits

13. Personal Development Planning

Develop students' abilities in research and investigation by finding and solving computer and software problems, urging them to keep abreast of modern technical developments and to view them closely through information sources such as books, magazines, websites, and others.

14. Admission criteria .

The department accepts graduates of the scientific branch, and their acceptance is central by the ministry on the basis of competition and graduation rate.

15. Key sources of information about the program

1- The Internet.

3- The experiences of Arab and international universities.

4- The current curricula according to the vocabulary that was provided to the department by the esteemed ministry.

5. Curriculum books available in libraries and the Internet.

Curriculum Skills Map									
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please tick in the relevant boxes where individual Program Learning Outcomes are being assessed

Program Learning Outcomes	
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TEMPLATE FOR COURSE SPECIFICATION COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the program specification.

1. Teaching Institution	Southern Technical University
2. University Department/Centre	Technical Institute / Qurna
3. Course title/code	Data structur
4. Program(s) to which it contributes	diploma
5. Modes of Attendance offered	weekly
6. Semester/Year	yearly
7. Number of hours tuition (total)	120 hours
8. Date of production/revision of this specification	٢٠٢٢-٦-
9. Aims of the Course	
1- Teaching the student how to represent data in computer memory	
2- Teaching the student the space & time complexity, its components and methods of calculating them	
3- Teaching the student the static and dynamic techniques to reserve memory locations	
4- Teaching the student how to deal with the matrix, write the programs related to it, and reserve the matrix with run & compiler time	
5- Teaching the student the structures of the moving data linear link list and its types and programming the algorithms of addition, deletion and search	
6- Teaching the student non-linear hyperdata structures (tree), their installation and programming	
7- Teaching the student the methods and techniques of searching and arranging data in each of the data structures	
1- Teaching the student how to represent data in computer memory	

10· Learning Outcomes, Teaching ,Learning and Assessment Method

A- Knowledge and Understanding

A1- Enable the student to know the basics of the work of data structures.

A2- Enable the student to know and understand the functions of data structures.

A3- Enabling the student to learn data programming with multiple and different structures

B. Subject-specific skills

B1 - To provide the student with the skills to deal with different data structures

B2 - To provide the student with skills in how to build a program with less sad space and a short and ideal implementation time

Teaching and Learning Methods

Theoretical lectures/homework, reports, C++ compiler

Assessment methods

Monthly exams, daily surprise exams

Mid-year and final year exams, in addition to grades given for class participation and homework

C. Thinking Skills

C1- Receiving information about data structures smoothly

C2 - Respond to the amount of new information about data structures

C 3- Value judgment

C4- Evaluation of the students during the daily lecture

Teaching and Learning Methods

continuous guidance

Open and ongoing discussions

Assessment methods

Continuous observation of the student by his teacher

Ongoing student interviews

Continuous open discussions with students

D. General and Transferable Skills (other skills relevant to employability and personal development)

D 1- Self-learning skills

D 2- Teamwork skills

D 3- Communication skills

D 4- Report writing skills

11. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method

12. Infrastructure

Required reading:

- CORE TEXTS
- COURSE MATERIALS
- OTHER

Data structures, Algorithms and Application in C++ by sartaj sahani.

Special requirements (include for example workshops, periodicals, IT software, websites)	Data Structures and Algorithms in C++ by Michael T. Goodrich
Community-based facilities (include for example, guest Lectures , internship , field studies)	Scientific journals in the field

13. Admissions	
Pre-requisites	
Minimum number of students	۳۰
Maximum number of students	۶۰