



Program Specification

— (Bachelor)

Program: Technical Support Program

Program Code (as per Saudi university ranking): **06120201**

Qualification Level: (5) Intermediate Diploma

Department: Information and Communication Technology

College: Applied College

Institution: Najran university

Program Specification: New updated*

Last Review Date: 13/04/1444

*Attach the previous version of the Program Specification.



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A. Program Identification and General Information

1. Program's Main Location :

Najran University City - Applied College – Building(24 -28)

2. Branches Offering the Program (if any):

No branches

3. Partnerships with other parties (if any) and the nature of each:

NO

4. Professions/jobs for which students are qualified

- 1- Telecom technology service worker**
- 2- Data and communication line installer**
- 3- Electronic maintenance of computers**
- 4- Electronic maintenance of public communication equipment**

5. Relevant occupational/ Professional sectors:

- **Telecommunications**
- **Maintenance**
- **IT**

6. Major Tracks/Pathways (if any):

Major track/pathway	Credit hours (For each track)	Professions/jobs (For each track)
1. Associate Technical Support Diploma	39	<ul style="list-style-type: none"> • Telecom technology service worker • Data and communication line installer
2. Intermediate Technical Support Diploma	75	<ul style="list-style-type: none"> • Electronic maintenance of public communication equipment • Electronic maintenance of computers
3.		
...		

7. Exit Points/Awarded Degree (if any):





exit points/awarded degree	Credit hours
1. Associate Diploma Certificate	39
2. IC3 Professional Certificate	26
3. CompTIA A+ Certificate	66
4. Intermediate Diploma Certificate	75
8. Total credit hours: (75)	





B. Mission, Objectives, and Program Learning Outcomes

1. Program Mission:

Preparing cadres in the field of technical support to bridge the gap in intermediate jobs by providing students with skills that enable him to provide technical support to the user, and solve problems related to applications and systems.

2. Program Goals:

The information systems program aims to provide the student with

- 1- Computer collection.
- 2- Upgrade the computer.
- 3- It maintains the computer.
- 4- Provides support for technical problems in the computer.
- 5- Provides technical support in work related to computer networks and their protection.
- 6- Provides basic support for applications and operating systems.
- 7- Provides basic support for network operating systems.
- 8- Manages technical support centers
- 9- Communicates functionally with specialists in the field of specialization.
- 10- Maintains simple communications equipment.
- 11- Design digital circuits for a specific application.

3. Program Learning Outcomes*

Knowledge and Understanding

K1	The student define the basic concepts related to technical support
K2	The student understands the principles of modern technical support
K3	The student acquires technical skills related to networks and smart devices
K4	
K...	

Skills

S1	The student uses computer programs including intelligent operating systems and communications
S2	The student analyzes problems related to computer operating systems and digital circuits
S3	The student discovers computer malfunctions and ways to maintain them
S4	The student builds reports of the various malfunctions that keep occurring and addresses them
S...	

Values, Autonomy, and Responsibility

V1	The student is committed to the ethical values adopted by the university in the work environment
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V2	The student participates in bilateral work and teamwork and takes responsibility in decision-making
V3	
V4	
V...	

* Add a table for each track or exit Point (if any)





C. Curriculum

1. Curriculum Structure

Program Structure	Required/ Elective	No. of courses	Credit Hours	Percentage
Institution Requirements	Required	0	0	0
	Elective	0	0	0
College Requirements	Required	8	16	21.6%
	Elective			
Program Requirements	Required	16	47	63.5%
	Elective			
Capstone Course/Project		1	1	4.1%
Field Training/ Internship				
Residency year				
Others				
Total		27	74	100%

* Add a separate table for each track (if any).

2. Program Courses

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
Level 1	156 CIS-2	Computer Skills 1	Required		2	College
	197ENG-2	Grammar1	Required		2	
	192ENG-2	Reading and writing1	Required		2	College
	193ENG-2	Listening & Speaking1	Required		2	College
	159MAN-2	Modern communication Skills	Required		2	College
	180 CIS-2	Computer Mathematics	Required		2	Program
	181CIS-3	Programming Basics	Required		3	Program
	Total				15Hrs	
Level 2	157CIS-2	Computer Skills 2	Required	156 CIS-2	2	Program
	167CIS-3	Operating systems	Required		3	Program
	154 CIS-3	Technical Support Skills	Required		3	Program
	195ENG-2	Reading and writing2	Required	192ENG-2	2	College
	196ENG-2	Grammar2	Required	197ENG-2	2	College
	198ENG-2	Listening & Speaking2	Required	193ENG-2	2	College
	155 CIS-3	Computer assembly and operation	Required		3	Program
	Total				17Hrs	





Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
Level 3	254 CIS-3	computer maintenance	Required		3	Program
	165 CIS-3	computer networks	Required		3	Program
	190 CIS-2	information security principles	Required		2	Program
	269 CIS-3	Database basics	Required		3	Program
	256 CIS-2	Smart device operating Systems	Required	167 CIS-3	2	Program
	252 CIS-4	digital circuits	Required	180 CIS-2	4	Program
Total						17Hrs
Level 4	281CIS-3	Applied Project	Required	All the above	3	Program
	253 CIS-4	Network Support	Required	165 CIS-3	4	Program
	255 CIS-3	Qualification for professional certifications	Required		3	Program
	257 CIS-3	Selected Topics	Required		3	Program
	258 CIS-4	communication systems	Required	252 CIS-3	4	Program
	Total					17Hrs
Level 5	283 CIS-6	Training Field-2	Required	All the above	6	Program
	Total					6Hrs
Level 6						
Level 7						
Level 8						

* Include additional levels (for three semesters option or if needed).

** Add a table for the courses of each track (if any)

3. Course Specifications:

Insert hyperlink for all course specifications using NCAAA template (T-104)

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4. Program learning Outcomes Mapping Matrix:





Align the program learning outcomes with program courses' according to the following desired performance levels (*I* = *Introduced* & *P* = *Practiced* & *M* = *Mastered*).

Course code & No.	Program Learning Outcomes											
	Knowledge and understanding				Skills				Values, Autonomy, and Responsibility			
	K1	K2	K3	---	S1	S2	S3	S4	V1	V2	----	
156 CIS-2	I		I		I	P						
197ENG-2	I	I							I		I	
192ENG-2		I			P	P	I			I		
193ENG-2	I								P		I	
159MAN-2	I						I	M		I		
180 CIS-2	I	I								I		
157CIS-2					M			M		I		
167CIS-3										M		
181CIS-3	I		I		M		M	M		P		
195ENG-2												
196ENG-2	P		I		P		M	M		P		
198ENG-2		P					M	P	M			
154 CIS-3	I	I	I							P		
155 CIS-3	P	I			M	P	P		P			
165 CIS-3			M			M		M				
190 CIS-2	P	I					M			I		
182 CIS-2	I						I	M		M		
252 CIS-3			P					M		M		
254 CIS-3		P				P	I		P			
256 CIS-2			I			I		M	P			
269 CIS-3	P	M			M		M					
253 CIS-4	P	P	P		M		M					
255 CIS-3	P	P				P						





Course code & No.	Program Learning Outcomes										
	Knowledge and understanding				Skills				Values, Autonomy, and Responsibility		
	K1	K2	K3	---	S1	S2	S3	S4	V1	V2	----
257 CIS-3					P			M		M	
258 CIS-4		M						P		M	
281CIS-3	P	P	M		M		P	M		M	
286CIS-6	M	M	I		P		M				

* Add a separate table for each track (if any).

5. Teaching and learning strategies applied to achieve program learning outcomes.

Describe teaching and learning strategies and curricular and extra-curricular activities adopted to achieve the Program's learning outcomes in all areas.

1. Lectures
2. Small and large group discussions
3. Brainstorming
4. Working in small group
5. Application in laboratories
6. Small projects

6. Assessment Methods for program learning outcomes.

Describe assessment methods (Direct and Indirect) that can be used to measure the achievement of program learning outcomes in all areas.

The Program should devise a plan for assessing Program Learning Outcomes (all learning outcomes should be assessed at least twice in the bachelor program's cycle and once in other degrees).

- 1- Monthly Exams
- 2- Periodic exercises
- 3- Practical exams
- 4- Application project report evaluation
- 5- Discussion of the applied project





- 6- Evaluation of the trainee's report
- 7- Trainee's discussion
- 8- Final Exams

D. Student Admission and Support:

1. Student Admission Requirements

- 1. He must have a high school certificate or its equivalent from within the Kingdom or from outside.
- 2. Should not have passed the high school or equivalent for more than five years (for regularity).
- 3. Passing the National Center for Measurement and Evaluation
- 4. Successfully pass any test or personal interview determined by the University.
- 5. Be medically fit.
- 6. The applicant should not exceed 30 years of age.
- 7. To obtain the approval of his / her reference to the study if he works in any governmental or private entity.
- 8. Has not obtained a bachelor's degree from another university.
- 9. He shall meet any other conditions determined by the University Council and announce the time of submission.
- 10. Not be separated from another university for disciplinary or educational

2. Guidance and Orientation Programs for New Students

(Include only the exceptional needs offered to the students of the Program that differ from those provided at the institutional level).

- At the beginning of the student's enrollment in the program, the Technical Support Program
- Department at the beginning of the semester will hold a meeting with the new students.
- The program structure, the study plan and the program guide will be presented to the new students.
- Students are introduced to the system of academic guidance and the distribution of students to academic counselors who help students in academic and academic affairs and work to clarify the things needed by students, guide them in the process of registration of courses, and solve the problems they face.

3. Student Counseling Services





(Academic, professional, psychological, and social)

(Include only the exceptional needs offered to the students of the Program that differ from those provided at the institutional level).

Program of Academic Guidance for each semester	
week	Tasks and activities.
1, 2	Hold a meeting with the students of the department to welcome them and acquaintances and clarify the tasks of the academic guide
3	<ul style="list-style-type: none"> - Meeting with the Dean, the Undersecretaries and the Head of Computer Department with the new students. - Courses Delete and add action
4	<ul style="list-style-type: none"> - Holding a meeting with the members of the faculty in the department to coordinate with them in the performance of tasks and the formation of the educational bag. - To develop a list of the names of students and their cases in terms of being incompetent or outstanding or creative and inform the members of the faculty. - First Class Report (Guides)
5	<ul style="list-style-type: none"> - Limiting the creative activities of students and their tendency to start joining the various activities in college. - Restricting the number of students who did not exceed 75% of the lectures and contact them or their families to inform them of their embarrassment and to determine the reasons for this and whether it is possible to provide assistance.
8	Psychological preparation and problem solving for the first quarterly test.
10	Restrict students who did not exceed 50% of the lectures and contact them or their families to inform them of their embarrassment and to find out the reasons for this and whether it is possible to provide assistance.
11	A meeting with all members of the faculty to determine the conditions of students who failed (after the first and second semesters test) and what was directed towards them and the extent of the impact of the program followed with them in the adjustment of their results of study as well as outstanding students and their motivation, Special care.
13	Restrict students who did not exceed 25% of the lectures and contact them or their families to inform them of their embarrassment and to determine the reasons for this and whether it is possible to provide assistance
13	<ul style="list-style-type: none"> - Instructing the students of the department how to deal with the anxiety tests and ways to overcome it. - Second report on the semester (mentors).
14	Survey the students of the department to learn about their impressions of the activities of academic guidance section.
15	Report of the academic advisor on the activity of academic guidance department during the semester and submitted to the head of the department.

4. Special Support

(Low achievers, disabled, gifted, and talented students).

- 1) A list of outstanding and talented students in the program at the end of the academic year prepare
- 2) Honoring outstanding and gifted students during the introductory meeting at the beginning of the academic year and inviting their parents
- 3) Distribute certificates of excellence to students who are outstanding and talented
- 4) Publishing the names of outstanding and talented students in the program on the website of the College
- 5) Put the names of the outstanding in the plaque of honor for the program and are displayed throughout the year
- (6) Conducting monthly social evenings where the Dean of college and faculty members meet





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E. Faculty and Administrative Staff:

1. Needed Teaching and Administrative Staff

Academic Rank	Specialty		Special Requirements / Skills (if any)	Required Numbers		
	General	Specific		M	F	T
Professor	Computer Sciences			2	2	4
Associate Professor	Computer Sciences			2	2	4
Assistant Professor	Computer Engineering			2	2	4
Lecturer	Information system			2	2	4
Teaching Assistant	Computer Sciences			5	5	10
Technicians and Laboratory Assistants	Technical			3	3	6
Administrative and Supportive Staff	Business office			3	3	6
Others (specify)						

F. Learning Resources, Facilities, and Equipment:

1. Learning Resources

Learning resources required by the Program (textbooks, references, e-learning resources, web-based resources, etc.)

- IC3 GS5 Certification Guide, ISBN: 978-1-55332-463-8, 2016 CCI Learning Solutions Inc
- IC3 (GS5) 3EXAMS [الإنترنت نهاب اندونيت انشهاده ARABIC]





- A+ Guide to Managing and Maintaining Your PC. By Jean Andrews, 8 th Edition
- Frenzel, Louis. Principles of Electronic Communication System
- S. Haykin, "Communication Systems", J. Wiley and Sons
- Behrouz A. Forouzan, Data communications and networking, 5th Edition, McGraw-Hill, 2013, ISBN:9780-07-337622-6
- William Stallings Data and Computer Communications, 10th Edition, Pearson, 2014, ISBN-10: 0-13-350648-7
- Computer Networks 5th Ed. Andrew S. Tanenbaum, Pearson Prentice Hall, 2010
- Information Technology Project Management , Kathy Schwalbe, 7th edition, 2014
- IT Essentials Companion Guide v6, 6th Edition by Cisco Networking Academy, Cisco Press (page 73 - 102).
- Modern Operating Systems", Andrew S. Tanenbaum., Third Edition , Prentice Hall
- Michael E. Whitman, Herbert J. Mattord, Principles of information security, Cengage Learning, 2013. W. Stallings, Cryptography and Network Security: Principles and Practice, Prentice Hall, Six Edition. 2013.
- ochen M.Schiller, Mobile Communications, 2nd edition , Pearson Education, India 2003

2. Facilities and Equipment

(Library, laboratories, classrooms, etc.)

- Providing computer labs equipped with the required software to teach practical courses, capacity commensurate with the number of students
- Providing classrooms equipped with modern educational aids (display screens) with a capacity commensurate with the number of students

3. Procedures to ensure a healthy and safe learning environment

(According to the nature of the Program)

- A precautionary committee responsible for following up on health procedures
- Providing security and safety equipment
 - There are emergency exits





G. Program Quality Assurance:

1. Program Quality Assurance System

Provide a link to the quality assurance manual.

[دليل نظام ضمان الجودة](https://ddq.nu.edu.sa/iso/page-366.html)

2. Procedures to Monitor Quality of Courses Taught by other Departments

- Specify a list of approved books as a source
- Updating and reviewing courses, then approving them by the department council

Considering the textbook as the minimum for a scientific subject

3. Procedures Used to Ensure the Consistency between Main Campus and Branches (including male and female sections).

do not apply

4. Assessment Plan for Program Learning Outcomes (PLOs),

The learning outcomes of the courses and the program are measured after each semester. There is a relationship between the learning outcomes of the program with the learning outcomes of the courses as in the matrix included in the program description.

Program learning outcomes and course learning outcomes are measured through an electronic program designed using Microsoft Excel. The program was programmed based on the number of program learning outputs, the relative weights of each scheduled output in relation to the program output.

The data to be entered are:

1. Course information
2. Students' names
3. Write the number of course learning outcomes

After that, the appropriate assessment is selected and students' grades are entered for the specified outcome

After saving, the program measures the percentage of outputs achieved





The program provides a diagram for each area of learning outcomes that includes the target and actual level of performance.

strength point:

There is one system in the program to measure learning outcomes

Weak points

After the notes in the system, you need to modify, for example, the possibility of adding more than 100 students to the system

improvement points

Develop and update the system in line with the system users' feedback

5. Program Evaluation Matrix

Evaluation Areas/Aspects	Evaluation Sources/References	Evaluation Methods	Evaluation Time
Program leaders	Program Faculties	questionnaires	End of year
Teaching and assessment effectiveness	the students	questionnaires	during the semester
learning resources	Students - faculty members	questionnaires	during the semester
Services	Students - faculty members	questionnaires	End of year

Evaluation Areas/Aspects: e.g., leadership, effectiveness of teaching & assessment, learning resources, services, partnerships, etc.

Evaluation Sources: students, graduates, alumni, faculty, program leaders, administrative staff, employers, independent reviewers, etc.

Evaluation Methods: e.g., Surveys, interviews, visits, etc.

Evaluation Time: e.g., beginning of semesters, end of the academic year, etc.





6. Program KPIs*

The period to achieve the target (____) year(s).

No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
1	KPI-P01	Percentage of performance indicators of the operational plan objectives of the program that achieved the targeted annual level to the total number of indicators targeted for these objectives in the same year	100%	The percentage of performance indicators of the operational plan goals that achieved the target level to the total number of indicators targeted for these goals in the same year	End of the year
2	KPI-P02	Students' Evaluation of quality of learning experience in the program	90%	Average overall rating of final year students for the quality of learning experiences in the program, on a five-level scale in questionnaires	End of each semester
3	KPI-P03	Students' evaluation of the quality of the courses		Average student overall rating for course quality, on a five-level scale in questionnaires	End of each semester
4	KPI-P04	Completion rate	95%	Percentage of undergraduate students who have completed in the minimum set period of the program in each batch	End of the year
5	KPI-P05	First-year students retention rate	99%	Percentage of first-year students who continue in the following year to the total number of first-year	End of the year





No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
				students in the same year	
6	KPI-P06	Students' performance in the professional and/or national examinations	100%	Percentage of students or graduates who pass professional and/or national examinations, their average and median score -if any	End of the year
7	KPI-P07	Graduates' employability and enrolment in postgraduate programs	95%	Percentage of program graduates who: Employees-- enrolled in a postgraduate program during the first year of their graduation to the total number of graduates in the same year	End of the year
8	KPI-P08	Average number of students in the class	25	Average number of students per class (per meeting/teaching activity: small group lecture, panel discussions, lab or clinical lessons(Beginning of the semester
9	KPI-P09	Employers' evaluation of the program graduates proficiency	95%	The average overall rating of employers for the efficiency of program graduates on a five-level scale in questionnaires	End of year
10	KPI-P10	Students' satisfaction with the offered services	95%	Average rating of students' satisfaction with the various services provided by the program	End of each semester





No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
				(restaurants, transportation, sports facilities, academic advising) on a five-level scale in questionnaires	
11	KPI-P011	Ratio of students to teaching staff	1:25	The Percentage of the total number of students to the total number of full-time faculty or its equivalent in the program	Beginning of the year
12	KPI-P012	Percentage of teaching staff distribution	1:1	Percentage distribution of faculty members in terms of: a- gender b- branches c scientific rank	Beginning of the year
13	KPI-P013	Proportion of teaching staff leaving the program	0%	Percentage of faculty who leave the program annually for reasons other than reaching the legal age to the total number of faculty members	End of year
14	KPI-P014	Percentage of publications of faculty members	50%	Percentage of faculty members who published at least one research during the year to the total number of faculty members in the program	End of year
15	KPI-P015	Rate of published research per faculty member	90%	Average number of refereed and/or published research for each faculty member	End of year





No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
16	KPI-P016	Citations rate in refereed journals per faculty member	90%	during the year (the total number of refereed and/or published research to the total number of full-time faculty members or its equivalent during the year)	End of year
17	KPI-P017	Satisfaction of beneficiaries with the learning resources	90%	Average rating of beneficiaries' satisfaction with the adequacy and diversity of learning resources (references, periodicals, databases, etc.) on a five-level scale in questionnaires	End of year
1	KPI-P01	Percentage of performance indicators of the operational plan objectives of the	100%	The percentage of performance indicators of the operational plan	End of the year





No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
		program that achieved the targeted annual level to the total number of indicators targeted for these objectives in the same year		goals that achieved the target level to the total number of indicators targeted for these goals in the same year	
2	KPI-P02	Students' Evaluation of quality of learning experience in the program	90%	Average overall rating of final year students for the quality of learning experiences in the program, on a five-level scale in questionnaires	End of each semester
3	KPI-P03	Students' evaluation of the quality of the courses		Average student overall rating for course quality, on a five-level scale in questionnaires	End of each semester
4	KPI-P04	Completion rate	95%	Percentage of undergraduate students who have completed in the minimum set period of the program in each batch	End of the year
5	KPI-P05	First-year students retention rate	99%	Percentage of first-year students who continue in the following year to the total number of first-year students in the same year	End of the year
6	KPI-P06	Students' performance in the professional and/or national examinations	100%	Percentage of students or graduates who pass professional and/or national	End of the year





No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
				examinations, their average and median score -if any	
7	KPI-P7	Graduates' employability and enrolment in postgraduate programs	95%	Percentage of program graduates who: Employees-- enrolled in a postgraduate program during the first year of their graduation to the total number of graduates in the same year	End of the year
8	KPI-P08	Average number of students in the class	25	Average number of students per class (per meeting/teaching activity: small group lecture, panel discussions, lab or clinical lessons)	Beginning of the semester
9	KPI-P09	Employers' evaluation of the program graduates proficiency	95%	The average overall rating of employers for the efficiency of program graduates on a five-level scale in questionnaires	End of year
10	KPI-P10	Students' satisfaction with the offered services	95%	Average rating of students' satisfaction with the various services provided by the program (restaurants, transportation, sports facilities, academic advising) on a	End of each semester





No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
				five-level scale in questionnaires	
11	KPI-P011	Ratio of students to teaching staff	1:25	The Percentage of the total number of students to the total number of full-time faculty or its equivalent in the program	Beginning of the year
12	KPI-P012	Percentage of teaching staff distribution	1:1	Percentage distribution of faculty members in terms of: a- gender b- branches c scientific rank	Beginning of the year
13	KPI-P013	Proportion of teaching staff leaving the program	0%	Percentage of faculty who leave the program annually for reasons other than reaching the legal age to the total number of faculty members	End of year
14	KPI-P014	Percentage of publications of faculty members	50%	Percentage of faculty members who published at least one research during the year to the total number of faculty members in the program	End of year
15	KPI-P015	Rate of published research per faculty member	90%	Average number of refereed and/or published research for each faculty member during the year (the total number of refereed and/or published	End of year





No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
				research to the total number of full-time faculty members or its equivalent during the year(
16	KPI-P016	Citations rate in refereed journals per faculty member	90%	Average number of citations in refereed journals from research published for each faculty member in the program (total number of citations in refereed journals from practical research published for full-time faculty members or its equivalent to the total number of published research(End of year
17	KPI-P017	Satisfaction of beneficiaries with the learning resources	90%	Average rating of beneficiaries' satisfaction with the adequacy and diversity of learning resources (references, periodicals, databases, etc.) on a five-level scale in questionnaires	End of year

*including KPIs required by NCAAA

H. Specification Approval Data:

Council / Committee





Reference No.	
Date	

