





Program Specification

— (Bachelor)

Program Name: Programming and databases
Program Code (as per Saudi university ranking): No 061301
Qualification Level: Intermediate Diploma
Department: computer department
College: Applied College
Institution: Najran university
Program Specification: New ⊠ updated* □
Last Review Date: 1/10/2024

^{*}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

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

According to the Unified Saudi Classification of Occupations, they are:

252104 Database programmer

351204 Database support technician

251401 Application programmer

351203 Software Support Technician

351101 Information Technology Operations Technician

351304 Computer systems technician

5. Relevant occupational/ Professional sectors:

- The Saudi American Institute
- Higher Gulf Vision Institute for Training
- Centennial Institute

New Horizon

6. Major Tracks/Pathways (if any):

Major track/pathway	Credit hours (For each track)	Professions/jobs (For each track)
1. Intermediate Diploma in Programming and Database	73	Database programmer -Database support technician -Application programmer -Software Support Technician - Information Technology Operations Technician - Computer systems technician
2.		
3.		

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

exit points/awarded degree	Credit hours
1. Diploma in Applied Computer Science (Associate Diploma)	40
2. IC3 Professional Certificate	26





4. PCAP Certificate 8. Total credit hours: ()	12	
3. Oracle Database SQL	12	





B. Mission, Objectives, and Program Learning Outcomes

1. Program Mission:

Preparing cadres in the field of programming and databases to bridge the gap in intermediate jobs by providing students with skills of analysis, design and application of programming and databases tools

2. Program Goals:

The information systems program aims to provide the student with

- 1-Preparing cadres in the field of programming and databases to bridge the gap in intermediate jobs by providing students with skills of analysis, design and application of programming and databases tools
- 2-skills of programming, design, and operation of database systems that operate institutions, such as: banks, telecommunications companies, ... and others
- 3-Managing databases, keeping them, storing them, protecting them, and retrieving them when needed.
- 4-Understand the requirements of the labor market in software and database systems and provide appropriate solutions to them..

3. Program Learning Outcomes*

Know	ledge and Understanding
K1	The student describes the basic knowledge that enables him to design software and databases for organizations and companies.
K2	The student knows the basic components of programming and databases that enable him to deal with software and database systems
К3	The student understands the different algorithms used in software and database systems
K4	
K	
Claille	

Skills

The student applies the basic skills that enable him to work on developing software and database systems for institutions and companies.



S2	The student analyzes database systems that are used in institutions, such as: banks, telecommunications companies, and others.
S3	The student designs database systems
S4	The student develops websites and applications in databases
S	
Value	s, Autonomy, and Responsibility
V1	The student is committed to the values adopted by the university as guidelines for behavior and performance in terms of ethical values in the work environment
V2	The student respects diverse work environments and takes responsibility for decision-making
V3	The student is ables to work in a team spirit and leadership
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 Descriptors onto	Required	0	0	0
Institution Requirements	Elective	0	0	0
Callaga Dagwigayaanta	Required	8	16	22%
College Requirements	Elective			
Due anone Descriptore ente	Required	16	46	63%
Program Requirements	Elective	1	2	3%
Capstone Course/Project		1	3	4%
Field Training/ Internship		1	6	8%
Residency year				
Others				
Total		27	73	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)
	156حال-2	Computer Skills 1	Required		2	Program
	159دار -2	Modern communication skills	Required		2	College
	272حال-3	Introduction to databases	Required		3	Program
Level	192نجل-2	Reading and writing	Required		2	College
1	193نجل-2	Listening & Speaking	Required		2	College
	197نجل-2	Grammar1	Required		2	College
	181حال-3	Programming Fundamentals	Required		3	Program
					16	
	157حال-2	Computer Skills 2	Required	156حال-2	2	Program
	196نجل-2	Grammar2	Required	197نجل-2	2	College
	195نجل-2	Reading and writing2	Required	192نجل-2	2	College
	198نجل-2	Listening & Speaking2	Required	193نجل-2	2	College
Level 2	3-ال-183	Structured Programming	Required	181حال-3	3	Program
	3-ال-173	Database Management Systems	Required	3 172حال-	3	Program
	180حال-2	mathematics	Required		2	Program
					16	
Level	165حال-3	Computer Networks	Required		3	Program
3	284حال-3	oriented programming1	Required	حال-1833	3	Program



Level	Course Code	Course Title	Required or Elective	Pre- Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
	2913حال-	Structured Query Language1	Required	3-ال-173	3	Program
	286حال-3	Web pages Design and Programming	Required		3	Program
	3 167حال-	Operating systems	Required		3	Program
					17	
	264حال-3	Data Structures	Required		3	Program
	285حال-3	oriented programming2	Required	284 3حال-	3	Program
Level	3حال-292	Structured Query Language2	Required	3ءال-291	3	Program
4	3حال-297	Database Management	Required		3	Program
	2663حال-	Internet database application development	Required	286حال-3	3	Program
					15Hrs	
	281حال-3	Applied Project	Required	-	3	Program
	283حال-6	Training Field2	Required	-	6	Program
Level 5	170حال-2	Different concepts in the computer	Elective		2	Program
					11Hrs	

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

3. Course Specifications:

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

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).

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

				Pro	gram L	earning	Outcor	nes			
Course code & No.		Knowled underst	dge and tanding	l	Skills				Values, Autonomy, and Responsibility		
	K1	K2	K3		S1	S2	S3		V 1	V2	
156حال-2	I	I			I						I
159دار -2	I	I			I	I			I		
272حال-3	I		I		I				I		



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

				Pro	gram L	earning	Outcor	nes				
Course code & No.		Knowledge and understanding				Skills				Values, Autonomy, and Responsibility		
	K1	K2	K3		S1	S2	S3		V 1	V2		
192نجل-2			P						I			
193نجل-2	I	I			I		I		I			
197نجل-2		P	I			P			I			
181حال-3	I	P	I			I		P	I			
157حال-2		I	I			I	I		P	P	I	
1962نجل-	I		P			P	P		M		I	
195نجل-2	I	I			P	P	I		P			
198نجل-2	P	M			M	P	P	P			P	
183حال-3	p	P	P		p	I			P			
173حال-3		I	P			P	I				P	
180حال-2		I	P			P	I		P		M	
165حال-3	I	I			M	P			I			
284 3 حال-	P	M				P	M				P	
2913حال-	P	P			M	M		M	M	M	I	
286حال-3	M	M	I	P	P	P	I	I	M	M	P	
167حال-3	P	P			P	P			M	M	I	
264حال-3	P	P			M	M			M	M	I	
285حال-3	M	M			P	P			M		I	
292حال-3	P	P			P	P			M			
297حال-3	M	M			M	M			M		I	
266حال-3	P	P							M		I	
281حال-3	P	P			P	M			P	M		
283حال-6	P	P			P	P			P	P		
حال-1702	P	M			M	P	P	P			P	

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





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 reasons

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 Information Security 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 and guide them in the process of registration of courses and solve the problems they face





3. Student Counseling Services

4.

(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	 Meeting with the Dean, the Undersecretaries and the Head of Computer Department with the new students. Courses Delete and add action
4	 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	 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	 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.

Special Support

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

The plan of caring for outstanding and talented students in the Applied college

- 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 with the elite and talented students

A program to support students who are defaulted

- 1. Dividing the students into groups and meeting them periodically.
- 2. Support programs for disabled students are conducted twice a semester instead of once per semester
- 3. Support programs for students who fail in the presence of the administration of the college and provide certificates of appreciation to outstanding students to motivate students who fail
- 4. Updating the methods of communication with the students of the guide through various social media

E. Faculty and Administrative Staff:

1. Needed Teaching and Administrative Staff

A codomic Book	Specialty cademic Rank		Special	Required Numbers		
Academic Rank	General	Specific	Requirements / Skills (if any)	M	F	Т
Professor	Computer Sciences	Programmi ng		2	2	4
Associate Professor						
Assistant Professor	Computer Sciences			3	3	6
Lecturer						
Teaching Assistant						
Technicians and Laboratory Assistants	Technical	Programmi ng Databases Networks web page designs		4	5	9
Administrative and Supportive Staff	Business office			2	2	4
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.)



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

- Kenneth H. Rosen, DISCRETE MATHEMATICS AND ITS APPLICATIONS, SEVENTH EDITION, McGraw-Hill, 2012, ISBN 978-0-07-338309-5
- Oracle® Database Database Administrator's Guide
- Oracle® Database Database Administrator's Guide
- 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
- Manuals of Network simulators and network managements software
- Python Essentials Part 2 (Intermediate)

Edube Interactive :: Python Essentials - Part 2

- Steven F. Lott, Dusty Phillips, Python Object-Oriented Programming Fourth Edition, ISBN 978-1-80107-726-2, 2021
- Course at Udemy: Oracle Database 12c SQL Certified Associate 1Z0-071.

Learn and share SQL

- Steve O'Hean, Oracle Database SQL Exam Guide (Exam 1Z0-071), ISBN: 978-1-25-958461-9, 2017 Course at Udemy: Oracle Database 12c SQL Certified Associate 1Z0-071.
 - H. M. Deitel, P. J. Deitel, Internet & World Wide Web How to Program, Prentice Hall, Latest Edition
 - H. M. Deitel, P. J. Deitel, Internet & World Wide Web How to Program, Prentice Hall, Latest Edition
 - DATABASE SYSTEM CONCEPTS, SEVENTH EDITION, Abraham Silberschatz, Yale University, Henry F. Korth, 2020, ISBN 9780078022159, 0078022150
 - IC3 GS5 Certification Guide, ISBN: 978-1-55332-463-8, 2016 CCI Learning Solutions Inc
 - IC3 (GS5) 3EXAMS I الشهادة الدولية للحاسب والإنترنت [ARABIC]
 - Alexander, M., & Kusleika, R. (2018). Access 2019 Bible.
 - Goodrich, M. T., Tamassia, R., & Goldwasser, M. H. (2013). Data structures and algorithms in Python (pp. 978-1). Hoboken: Wiley.
 - Hetland, M. L. (2014). Python Algorithms: mastering basic algorithms in the Python Language. Apress.

E-Learning Resources

http://lms.nu.edu.sa/webapps/portal/frameset.jsp

المكــــتبة الرقمــية

http://lib.nu.edu.sa/DigitalLibbrary.aspx

https://www.tutorialspoint.com/python_data_structure/index.htm https://www.geeksforgeeks.org/python-data-structures-and-algorithms/

https://pythongeeks.org/python-data-structures/

https://www.udemy.com/course/ic3-certification-gs5-3exams-arabic/

https://www.w3schools.com/css/css_intro.asp

http://lms.nu.edu.sa/webapps/portal/frameset.jsp http://lib.nu.edu.sa/DigitalLibbrary.aspx

http://lms.nu.edu.sa/webapps/portal/frameset.jsp

https://www.udemy.com/course/oracle-database-12c-sql-certified-associate-1z0-071/

https://www.udemy.com/course/oracle-database-12c-sql-certified-associate-1z0-071/



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.

https://ddq.nu.edu.sa/iso/page-366.htm

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

Quality assurance requirements for the educational process elements	components of the educational process
-Induction program to prepare for new students in the program	
- Focus on class activities and	
- and non-classroom	
- Implementation of an approved academic advising system	
- Suggestion system f Implementation of	



-	Provides program guides	the students
	Reviewing course reports and writing reports on them periodically Preparing a file for each course that includes complete data about the course Determines a list of approved books as a source for each course in the program and makes them available to students. Define program advisory committees to follow up on the program and its quality Applying the standardized exam for the course that is taught by more than one faculty member in the program -Continuously updating the courses to keep pace with recent developments and then approving them by the department council -Considering the textbook as the minimum for a scientific subject, in addition to studies determined by the course coordinator -Apply a variety of teaching strategies and activities that fit the nature of the courses in the program Apply various methods of assessment, including: chievement test (midterm - practical - final) to to evaluate learning tromes related to Knowledge and skills Direct and indirect observation to evaluate learning outcomes related to values. Questionnaires for assessing students' satisfaction with (the course - teaching strategies - assessment methods - teaching members.(Course and program reports. -Reference audit reports Evaluation of the test paper	Program - Courses
-	The university provides a central and digital library that includes books that meet the needs of the program beneficiaries The university provides an internet service for faculty members and students	Library and learning resources



 The program provides an induction for new faculty members in the program Where it focuses on professional development through (training programs for faculty members - facilitating attendance at conferences - scientific meetings(Focusing on developing the capabilities of faculty members in using technology in teaching and learning -A periodic evaluation of the performance of the faculty members in the program includes: -Student evaluation -self evaluation Academic excellence assessment. A document is available that includes the tasks, roles and responsibilities of the faculty members Fair policies and procedures are applied to faculty members. 	to faculty members
Decisions delegating responsibilities formally defined in documents signed	
by the authorized person.	rules and
The program coordinator writes requirements for the program each year.	regulations of Operating
Complete lists of equipment used in the program. Including the custody of	
each member for the purposes of teaching and scientific research	
Periodic follow-up to evaluate the equipment and provide the necessary	Facilities
maintenance	And support
	available
 Follow-up the results of evaluating students' performance and comparing them with specific standards of performance, writing reports and developing plans for improvement 	
- Results of measuring learning outcomes for courses and programs	
 Writing reports for key performance indicators that define the current status of performance indicators 	
 Implementation of training programs for graduate students aimed at developing their professional abilities and skills, each in his field of specialization. 	
- Follow-up the results of evaluating students' performance and	
comparing them with specific standards of performance, writing	
reports and developing plans for improvement	
 A questionnaire for students of the last level in the program and the level of experience of the student 	





-	A questionnaire for graduates about the professional competencies they acquired in the program and their relationship to jobs in the labor market		3. 3-	
-	A questionnaire for the employers in which the graduates of the program work to identify the strengths and weaknesses of these graduates	graduates		

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





Evaluation Areas/Aspects	Evaluation Sources/References	Evaluation Methods	Evaluation Time
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	KPIs	Targeted	Measurement	Measurement
INO.	Code	KPIS	Level	Methods	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	During 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 fivelevel scale in questionnaires	During the year
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	During the year
4	KPI-P04	Completion rate	95%	Percentage of undergraduate students who have completed in the minimum set period of the program in each batch	During 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	During 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 examinations, their average and median score -if any	During the year

No	KPIs	I/DI-	Targeted	Measurement	Measurement
No.	Code	KPIs	Level	Methods	Time
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	During 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(During the year
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	During the 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 five-level scale in questionnaires	During the year
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	During 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	During 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	During the year

No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
				legal age to the total number of faculty members	
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	During the 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 research to the total number of full-time faculty members or its equivalent during the year(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(During the 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	During the year

^{*}including KPIs required by NCAAA

H. Specification Approval Data:

Council / Committee
Reference No.
Date

