

KG COLLEGE OF ARTS AND SCIENCE

Affiliated to Bharathiar University Accredited by NAAC ISO 9001:2015 Certified Institution KGiSL Campus, Coimbatore – 641 035

Criteria I

Key Indicator – 1.2 - Academic Flexibility

- 1.2.1 Number of Add on /Certificate/Value added programs offered during the last five years
- 1.2.2 Percentage of students enrolled in Certificate/ Add-on/Value added programs as against the total number of students during the last five years

Summary Report of the Add-on Programmes Year wise along with the Outcomes

2021-22 Odd Semester

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
1	Financial Derivatives	34 Hours	526	 Students learnt the Strategies to eliminate the risks associated with financial and investment management Imparted the necessary knowledge for pricing and for hedging of derivative securities in real life
2	Banking & Finance	32 Hours	518	Imparted the knowledge of policies and practices of commercial banks in India
3	Financial Markets	32 Hours	500	 Students Learnt about the different types of markets in finance Knowledge of regulatory bodies in finance is developed among the students
4	Programming Foundations with JavaScript, HTML and CSS	30 Hours	474	Students learnt the static and dynamic web page designing and the Interactive web page designing
5	PHP and My SQL	30 Hours	246	Students learnt to develop the web sites with the backend connectivity Sample web pages designed by students

	Name of Add on		Number of Students	
S. No.	/Certificate	Duration	completing the	Outcome of the Programme
	programs offered	of course	course in the	
			year	
6	API Design and Fundamentals of Google Cloud's Apigee API Platform	30 Hours	217	Students learnt to design, build, secure, deploy and manage the API solutions using Google Cloud's Apigee Platform Imparted the knowledge of API life cycle, proxies, Packages and API Platform
7	Android App Using Kotlin	30 Hours	208	 Students acquired the knowledge of application development in Android platform Students studied the app development environment of mobile based applications
8	Coursera: English for Science, Technology, Engineering, and Mathematics	30 Hours	153	Students learnt the use receptive skills through reading and listening to acquire good exposure to language and literature
9	BITS and Bytes of Computer Networking / Fundamentals of Computer Networking	30 Hours	100	Students acquired the fundamental knowledge of modern networking technologies and network trouble shooting
10	Joomla	30 Hours	99	Imparted the knowledge of content management in websites
11	Java for Android	30 Hours	96	Students learnt the context of core android components and UI

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
				learnt the android studio for app development
12	Soft Skill	30 Hours	85	Learnt to manage emotions, communicate effectively, empathize, motivate, lead a team and socialize.
13	Drupal	30 Hours	66	Imparted the knowledge of content management in websites
14	Using Python to Interact with the Operating System	30 Hours	58	 Students learnt the python development environment Learnt the automated system administration
15	From Data to Insights with Google Cloud Platform Specialization	30 Hours	49	Students acquired the knowledge of Bigquery, Machine Learning, Data Visualization (DataViz), SQL Google Cloud Platform and Cloud Computing
16	Front-End JavaScript Frameworks Overview: Angular	30 Hours	38	Students are able to design an interactive web page through front end JavaScript Frameworks, Reactive and TypeScript.
17	Drug Designing and Discovery Techniques	30 Hours	37	Imparted the knowledge of drug designing with the help of online tools
18	Business Communication	30 Hours	36	Students learnt to create the content on their own

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
19	Fundamentals of Network Communication	30 Hours	37	• Students gained the valuable skills in computer networks (switching, routing), system and network administration
20	R Programming	30 Hours	32	Learnt to write the simple pseudocodes and simple flow charts
21	Medical Coding	30 Hours	30	Imparted the knowledge of medical terminologies
22	LaTex	30 Hours	29	Students understood the concept of LaTex commands to mathematical formulae, create tables and printing texts
23	Web Design Literate Professional	30 Hours	28	Students learnt the static and dynamic web page designing and the Interactive web page designing
24	Arduino	30 Hours	26	 Students learnt the basic concepts of arduino and microprocessor programming 36 projects were designed and exhibited by the students in the Project Expo-21
25	Cheminformatics	30 Hours	26	Students acquired the skills in structural and functional gemomics
26	Introduction to Computers	30 Hours	24	Students learnt the basic computer skills

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
27	Digital Systems: From Logic Gates to Processors	30 Hours	19	Students learnt to design the small combinational and sequential logic circuits
28	GeoGebra	30 Hours	10	Students understood the concepts of construction of shapes



2021-22 Even Semester

			Number of	
S.	Name of Add on	Duration	Students	
	No. /Certificate programs of course		completing	Outcome of the Programme
		the course		
			in the year	
1	JavaScript for Beginners	30 Hours	574	Students learnt to develop the web sites
	tavasempt for Beginners	20110015	571	Learnt the basic concepts of javascript
				Students acquired the knowledge of 3D
2	Blender	30 Hours	367	modeling, materials, texturing, lighting,
				animation and sculpting
				Students learnt to make diagrams, logos,
3	Inkscape	30 Hours	244	programmatic marketing materials, web
				graphics, and even for paper scrapbooking.
	Developing Android Apps			Students learnt the android programming
4	with Invertor	30 Hours	237	and build fully functional apps for Android
	with hivertor			devices.
	Azure Infrastructure			Students learnt the foundational knowledge
5	Fundamentals	30 Hours	201	of cloud services and how those services
				are provided with Microsoft Azure
				Students understood the basics of computer
6	Introduction to Computers	30 Hours	114	and hardwares and the basic services such
				as google like Gmail and Drive
				• learnt the basics of python programming
	Introduction to Data			environment, including fundamental
7	Science in Python	30 Hours	101	python programming techniques such as
	J			lambdas, reading and manipulating csv
				files, and the numpy library.
8	Introduction to SCILAB	30 Hours	85	• Students learnt the computation, graphs,
		20 210 615		illustrations with Scilab

			Number of	
S.	Name of Add on	Duration	Students	
No.	/Certificate programs	of course	completing	Students understood the concepts historical, ethical and current leg framework in mass communication Students learnt to create the content their own Students learnt the machine learning algorithms and apply varied reinforcement algorithms to solve real times.
110.	offered	of course	the course	
			in the year	
9	Mass Media and Journalism	30 Hours	70	historical, ethical and current legal
10	Content Writing, Public Speaking & Presentation Skill	30 Hours	51	Students learnt to create the content on their own
11	Machine Learning	30 Hours	43	
12	DNA Barcoding	30 Hours	37	 Students learnt to identify the species by performing data queries Learnt about the molecular maker choices
13	Building Arduino Robots and Devices	30 Hours	30	 Students learnt the basic concepts of arduino and microprocessor programming 36 projects were designed and exhibited by the students in the Project Expo-21
14	Drug Design and Discovery	30 Hours	30	Imparted the knowledge of drug designing with the help of online tools
15	Python Programming	30 Hours	26	students learnt the python development environment
16	Hazard Analysis Critical Control Point	30 Hours	25	 Students understood the various types of hazards Learnt the various diseases caused contamination

S. No.	Name of Add on /Certificate programs offered An Introduction to the Internet of Things and	Duration of course	Number of Students completing the course in the year	Outcome of the Programme Imparted the knowledge of Various IoT
18	Embedded Systems Soft Skill	30 Hours	18	Learnt to manage emotions, communicate effectively, empathize, motivate, lead a team and socialize
19	Programming Foundation with HTML,CSS and JavaScript & Introduction to Programming using MATLAB	30 Hours	14	 Students learnt the static and dynamic web page designing Students learnt to write the moderate sized programmes that solve problems involves the manipulation of numbers
20	Fake News Detection Using Machine Learning, Introduction to Machine Learning & Cyber Threat Intelligence	30 Hours	14	 Students acquired the knowledge of machine learning algorithms with PyTorch, open source libraries used by leading tech companies in the machine learning field (e.g., Google, NVIDIA, CocaCola, eBay, Snapchat, Uber and many more).
21	Relational Database Design	30 Hours	13	Learnt the basics of database and found the solutions to the basic problem
22	Introduction to Programming and Animation with Alice	30 Hours	6	• Learnt how to program in the context of animation, simulation, storytelling, and building short games.
23	Front-End Web UI Frameworks and Tools: Bootstrap 4	30 Hours	4	Students are able to design an interactive web page through front end user interface with bootstrap

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
24	Web design for everybody- basics of web development and coding	30 Hours	3	Students are able to design a basic web site
25	Server side development with node JS, Express and Mango DB	30 Hours	2	Acquired the knowledge of server side web site development with front end (Java script) and back end database(Mongo DB)



2020-21 Even Semester

			Number of	
S.	Name of Add on	Duration	Students	
	/Certificate programs		completing	Outcome of the Programme
No.	offered	of course	the course	
			in the year	
1	IT Fundamentals / IT Essentials	30 Hours	676	Students understood the working principles of a computer
2	Software Engineering and Project Management	30 Hours	609	 Students understood how the IT industry is working Learnt to manage the software and its development
3	Financial Markets	30 Hours	529	Students Learnt about the different types of markets in finance Knowledge of regulatory bodies in finance is developed among the students
4	Wealth Management	30 Hours	527	Students understood the different investment plans and the risks involved.
5	GST Practitioner	40 Hours	507	Students learnt the process of GST
6	Python	40 Hours	368	Students learnt the python development environment
7	Amazon Web Services (AWS)	40 Hours	154	Imparted the knowledge of of the core AWS services, including compute, network, database, and storage services
8	MAT LAB	30 Hours	127	Students learnt to write the moderate sized programmes that solve problems involves the manipulation of numbers
9	CISCO Networking	40 Hours	80	Imparted the knowledge about detailed knowledge of Computer Networks, various protocols used in Communication,

			Number of		
S.	Name of Add on	Duration	Students		
No.	/Certificate programs			completing	Outcome of the Programme
110.	offered	of course	the course		
			in the year		
				Managing and configuring Cisco	
				Switches and Routers and various routing	
				protocols	
				Learnt to manage emotions, communicate	
10	Soft Skills	30 Hours	69	effectively, empathize, motivate, lead a	
				team and socialize.	
11	Content Writitng	30 Hours	54	Students learnt to create the content on	
11	Content Withing	30 Hours	34	their own	
	VLSI Designing and			Students learnt the design, troubleshoot,	
12	Verification	30 Hours	47	and simulate assembly C language and	
	Vermeation			Verilog HDL programs	
13	MS Office	30 Hours	34	• Students learnt the word documents,	
13	WIS Office	30 110018	34	Excel, PPT presentations	
				Students learnt the step-by-step approach	
14	PCB Designing and	30 Hours	26	to the development and manufacturing	
17	Fabrication	30 110013	20	cycle of a printed	
				circuit board	
15	Introduction to R	30 Hours	19	Students acquired the knowledge of the	
	Programming	30 110013	17	basic R programming	
				Students learnt the learn programming,	
	Oracle9i: Program with			management, and security issues of	
16	PL/SQL	30 Hours	17	working with PL/SQL program	
	THUYL			units, built-in packages with Oracle, the	
				creation of triggers, and stored procedures.	
				creation of triggers, and stored procedures.	

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
17	C++ Using Cloud Coder	30 Hours	14	• Students practiced the object-oriented programming concepts and techniques, practice the use of C++ classes and class libraries, arrays, vectors, inheritance and file I/O stream concepts



2019-20 Odd Semester

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme Students learnt the programming,
1	Oracle SQL and PL/SQL Developer	30 Hours	731	management, and security issues of working with PL/SQL program units, built-in packages with Oracle, the creation of triggers, and stored procedures.
2	HTML, XML and Photoshop	30 Hours	613	 Students learnt the static and dynamic web page designing and the Interactive web page designing Learnt the basics of photoshop
3	Adobe Illustrator	40 Hours	538	Learnt the basics of illustrator
4	PHP and MYSQL	40 Hours	581	Students learnt to develop the web sites with the backend connectivity Sample web pages designed by students
5	Tally ERP 9	30 Hours	115	Imparted the knowledge of accounting and learnt to maintain the accounts
6	C++ Programming	30 Hours	113	• Acquired the skills for writing a program in different C++ Integrated Development Environments.
7	Python Programming	30 Hours	103	Students learnt the python development environment
8	Content Writing, Public Speaking, Presentation Skills	30 Hours	98	Students learnt to create the content on their own
9	Arduino with Sensors and Drives	40 Hours	47	Students learnt to develop the programs on arduino
10	Raspberry pi with IoT	40 Hours	37	Student understood the concepts of Pi processing and learnt to develop their own projects with sensors

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
11	Arts of Electronics	40 Hours	34	Imparted the knowledge of microcontrollers with practical applications Learnt to develop their own projects with sensors
12	Photoshop	30 Hours	30	Learnt the basics of photoshop
13	Linux & Shell Scripting	40 Hours	27	Students learnt the basic set of commands and editors in the Linux operating system.
14	Art of Electronics	40 Hours	25	Imparted the knowledge of microcontrollers with practical applications Learnt to develop their own projects with sensors
15	Android Programming	30 Hours	25	 Students acquired the knowledge of application development in Android platform Students studied the app development environment of mobile based applications
16	HTML and CSS	40 Hours	6	Students learnt the static and dynamic web page designing and the Interactive web page designing



2019-20 Even Semester

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
1	Advance Excel	40 Hours	621	• Students acquired the knowledge of excel data model
2	C++ Programming	30 Hours	577	 Acquired the skills for writing a program in different C++ Integrated Development Environments.
3	Linux & Shell Scripting	30 Hours	579	• Students learnt the basic set of commands and editors in the Linux operating system.
4	Oracle SQL and PL/SQL Developer	40 Hours	324	• Students learnt the programming, management, and security issues of working with PL/SQL program units, built-in packages with Oracle, the creation of triggers, and stored procedures.
5	Tally ERP 9	30 Hours	259	• Imparted the knowledge of accounting and learnt to maintain the accounts
6	Content Writing, Public Speaking and Presentation Skill	30 Hours	98	• Students learnt to create the content on their own
7	Microsoft VB.Net Programming	30 Hours	34	• Students understood the fundamental skills in utilizing the tools of a visual environment Learnt the database connectivity with the front end

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year		Outcome of the Programme
8	Java Programming	30 Hours	33	•	Students learnt to develop the basic software using java programming
9	PHP & MYSQL	40 Hours	27	•	Students learnt to develop the web sites with the backend connectivity Sample web pages designed by students
10	HTML & CSS	40 Hours	14	•	Students learnt the static and dynamic web page designing and the Interactive web page designing
11	J2EE for Web Applications	30 Hours	6	•	Students learnt to develop the basic software using advanced java programming



2018-19 Odd Semester

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
1	HTML, XML and Photoshop	30 Hours	694	 Students learnt the static and dynamic web page designing and the Interactive web page designing Learnt the basics of photoshop
2	Adobe Illustrator	40 Hours	590	Learnt the basics of illustrator
3	PHP and MYSQL	30 Hours	485	• Students learnt to develop the web sites with the backend connectivity Sample web pages designed by students
4	Oracle SQL and PL/SQL	30 Hours	449	Students learnt the programming, management, and security issues of working with PL/SQL program units, built-in packages with Oracle, the creation of triggers, and stored procedures.
5	Microsoft VB.Net Programming	50 Hours	264	Students understood the fundamental skills in utilizing the tools of a visual environment Learnt the database connectivity with the front end
6	Tally ERP 9	30 Hours	188	Imparted the knowledge of accounting and learnt to maintain the accounts
7	Dot Net Programming	30 Hours	114	Students acquired the knowledge of developing a console application and the Microsoft Framework Architecture

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
				Students learnt to write the moderate
8	MATLAB	30 Hours	106	sized programmes that solve problems
				involves the manipulation of numbers
				Acquired the skills for writing a program
9	C++ Programming	30 Hours	103	in different C++ Integrated Development
				Environments.
				• Imparted the knowledge of
1.0				microcontrollers with practical
10	Art of Electronics	40 Hours	50	applications
				Learnt to develop their own projects with sensors
				Students learnt to develop the programs
11	Arduino with Sensors and Drives	40 Hours	38	on arduino
				• Imparted the knowledge of
		30 Hours	32	microcontrollers with practical
12	Art of Electronics			applications
				Learnt to develop their own projects with sensors
				Students practiced the object-oriented
				programming concepts and techniques,
13	C++ using Cloudcoder	40 Hours	27	practice the use of C++ classes and class
	Cioudeodoi			libraries, arrays, vectors,
				inheritance and file I/O stream concepts
14	Basic Android Programming	30 Hours	24	Students acquired the knowledge of application development in Android platform
				platform

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
				• Students studied the app development environment of mobile based applications
15	J2EE for Web Application	40 Hours	18	Students learnt to develop the web page using advanced java programming
16	HTML, CSS and Bootstrap	30 Hours	11	Students are able to design an interactive web page through front end user interface with bootstrap



2018-19 Even Semester

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
1	Advanced Excel	30 Hours	676	Students acquired the knowledge of excel data model
2	C++ Programming	40 Hours	590	• Acquired the skills for writing a program in different C++ Integrated Development Environments.
3	Networking	40 Hours	537	• Imparted the knowledge about detailed knowledge of Computer Networks, various protocols used in Communication
4	Linux & Shell Scripting	40 Hours	485	• Students learnt the basic set of commands and editors in the Linux operating system.
5	Tally ERP 9	30 Hours	361	Imparted the knowledge of accounting and learnt to maintain the accounts
6	Oracle SQL and PL/SQL Developer	40 Hours	290	• Students learnt the programming, management, and security issues of working with PL/SQL program units, built-in packages with Oracle, the creation of triggers, and stored procedures.
7	PCB Designing and Fabrication	40 Hours	50	• Students learnt the step-by-step approach to the development and manufacturing cycle of a printed circuit board

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
8	VLSI Design	40 Hours	37	• Students learnt the design, troubleshoot, and simulate assembly C language and Verilog HDL programs
9	PHP & MYSQL	40 Hours	34	• Students learnt to develop the web sites with the backend connectivity Sample web pages designed by students
10	Microsoft VB.Net Pogramming	30 Hours	32	 Students understood the fundamental skills in utilizing the tools of a visual environment Learnt the database connectivity with the front end
11	Raspberry Pi with IoT	40 Hours	29	• Student understood the concepts of Pi processing and learnt to develop their own projects with sensors
12	HTML & CSS	30 Hours	27	• Students are able to design an interactive web page through front end user interface
13	J2EE for Web Application	40 Hours	25	• Students learnt to develop the web page using advanced java programming



2017-18 Odd Semester

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
1	HTML, XML and Photoshop	30 Hours	601	 Students learnt the static and dynamic web page designing and the Interactive web page designing Learnt the basics of photoshop
2	PHP & MYSQL	40 Hours	587	Students learnt to develop the web sites with the backend connectivity Sample web pages designed by students
3	Oracle SQL/PL SQL	40 Hours	466	Students learnt the programming, management, and security issues of working with PL/SQL program units, built-in packages with Oracle, the creation of triggers, and stored procedures.
4	International Financial Reporting Standards	30 Hours	436	Students learnt the basics concepts of International Financial and accounting
5	Adobe Illustrator	40 Hours	315	Learnt the basics of illustrator
6	Photoshop/Photoshop and Illustrator	30 Hours	246	Learnt the basics of photoshop / Illustrator
7	Tally ERP 9	30 Hours	207	Imparted the knowledge of accounting and learnt to maintain the accounts
8	Linux and Shell Programming	40 Hours	155	Students learnt the basic set of commands and editors in the Linux operating system.

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year		Outcome of the Programme
9	C++ Programming	40 Hours	140	•	Acquired the skills for writing a program in different C++ Integrated Development Environments.
10	Basics of German Language	30 Hours	130	•	Students learnt to speak fluently in German language
11	RedHat Linux 6.0	30 Hours	76	•	Students acquired the knowledge of linux administration practically
12	Android Programming	30 Hours	47	•	Students acquired the knowledge of application development in Android platform Students studied the app development environment of mobile based applications
13	Art of Electronics	40 Hours	42	•	Imparted the knowledge of microcontrollers with practical applications Learnt to develop their own projects with sensors
14	Arduino	40 Hours	32	•	Students learnt to develop the programs on arduino
15	Arduino with Sensors and Drives	40 Hours	30	•	Students learnt to develop the programs on arduino with various sensors
16	Python Programming	30 Hours	24	•	Students learnt the python development environment

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year	Outcome of the Programme
17	Art of Electronics	40 Hours	14	 Imparted the knowledge of microcontrollers with practical applications Learnt to develop their own projects with sensors



2017-18 Even Semester

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year		Outcome of the Programme
1	Advanced Excel	40 Hours	605	•	Students acquired the knowledge of excel data model
2	Linux and Shell Programming / Linux and Shell Scripting	40 Hours	551	•	Students learnt the basic set of commands and editors in the Linux operating system.
3	C++ Programming	40 Hours	496	•	Acquired the skills for writing a program in different C++ Integrated Development Environments.
4	GST & E-Filing	30 Hours	434	•	Students learnt the process of GST and the e-filing process
5	Networking	30 Hours	427	•	Imparted the knowledge about detailed knowledge of Computer Networks, various protocols used in Communication
6	Oracle SQL	40 Hours	306	•	Students learnt the programming, management, and security issues of working with SQL program units, built-in packages with Oracle, the creation of triggers, and stored procedures.
7	Tally ERP 9	30 Hours	274	•	Imparted the knowledge of accounting and learnt to maintain the accounts
8	Basics in German Language	40 Hours	130	•	Students learnt to speak fluently in German language
9	PCB Designing and Fabrication	40 Hours	42	•	Students learnt the step-by-step approach to the development and manufacturing cycle of a printed circuit board
10	Python Programming	30 Hours	34	•	Students learnt the python development environment

S. No.	Name of Add on /Certificate programs offered	Duration of course	Number of Students completing the course in the year		Outcome of the Programme
11	Linux Programming	40 Hours	33	•	Students learnt the basic set of commands and editors in the Linux operating system.
12	VLSI Design	40 Hours	30	•	Students learnt the design, troubleshoot, and simulate assembly C language and Verilog HDL programs
13	Software Testing & Networking	40 Hours	24	•	Students learnt the basic networking and software testing concepts
14	J2EE for Web Application	40 Hours	18	•	Students learnt to develop the web page using advanced java programming
15	.Net Programming	30 Hours	14	•	Students acquired the knowledge of developing a console application and the Microsoft Framework Architecture

