

IDEAL COLLEGE OF ARTS AND SCIENCES
AUTONOMOUS & NAAC B
Dr. P.V.N RAJU VIDYAPRANGANAM
SAMALKOT ROAD, KAKINADA

LIST OF NEW COURSES

Academic Year - 2022 - 2023

S.No	Name of the New Courses	Department	Program
1	Abstract Algebra	Mathematics	B.Sc (M.C.Cs)
2	Real Analysis	Mathematics	B.Sc (M.C.Cs)
3	Linear Algebra	Mathematics	B.Sc (M.C.Cs)
4	Numerical Methods	Mathematics	B.Sc MPC, MPCs
5	Mathematical Special functions	Mathematics	B.Sc MPC, MPCs
6	Multiple Integrals and Applications of Vector Calculus	Mathematics	B.Sc MPC, MPCs
7	Integral transforms with Applications	Mathematics	B.Sc MPC, MPCs
8	Partial Differential Equations and Fourier Series	Mathematics	B.Sc MPC, MPCs
9	Number theory	Mathematics	B.Sc MPC, MPCs
10	Applications of Electricity & Electronics	Physics	MPC, MPCs
11	Electronic Instrumentation	Physics	MPC, MPCs
12	Optical Instruments and Optometry	Physics	MPC, MPCs
13	Optical Imaging and Photography	Physics	MPC, MPCs
14	Low Temperature physics & Refrigeration	Physics	MPC, MPCs
15	Solar Energy & Applications	Physics	MPC, MPCs
16	Data Science	Computer Science	B.Sc.(M.P.CS)
17	Python for Data Science	Computer Science	B.Sc.(M.P.CS)
18	Web Interface Designing Technologies	Computer Science	B.Sc.(M.P.CS)
19	Web Applications Development using PHP & MYSQL	Computer Science	B.Sc.(M.P.CS)
20	Internet of Things	Computer Science	B.Sc.(M.P.CS)

S.No	Name of the New Courses	Department	Program
21	Application Development using Python	Computer Science	B.Sc.(M.P.CS)
22	Database Management System	Computer Science	B.Sc.(M.P.CS)
23	Object Oriented Programming using Java	Computer Science	B.Sc.(M.P.CS)
24	Operating System	Computer Science	B.Sc.(M.P.CS)
25	Analytical Methods in Chemistry-1	Chemistry	B.Sc. (MPC, BZC)
26	Analytical Methods in Chemistry-2	Chemistry	B.Sc. (MPC, BZC)
27	Synthetic Organic Chemistry	Chemistry	B.Sc. (MPC, BZC)
28	Analysis of Organic Compounds	Chemistry	B.Sc. (MPC, BZC)
29	Industrial Chemistry - 1	Chemistry	B.Sc. (MPC, BZC)
30	Industrial Chemistry - 2	Chemistry	B.Sc. (MPC, BZC)
31	Environmental Chemistry	Chemistry	B.Sc. (MPC, BZC)
32	Green Chemistry and Nano Technology	Chemistry	B.Sc. (MPC, BZC)
33	Analytical methods in Chemistry	Chemistry	B.Sc. (MPC, BZC)
34	Cosmetics and Pharmaceutical Chemistry	Chemistry	B.Sc. (MPC, BZC)
35	Organic Chemistry and Spectroscopy	Chemistry	B.Sc. (MCCS)
36	Inorganic, Organic and Physical Chemistry	Chemistry	B.Sc. (MCCS)
37	Inorganic and Physical Chemistry	Chemistry	B.Sc. (MCCS)
38	Vegetable Crops – Cultivation Practices	Botany	B.Sc., B.Z.C
39	Vegetable Crops – Post Harvest Practices	Botany	B.Sc., B.Z.C
40	Plant Propagation	Botany	B.Sc., B.Z.C
41	Seed Technology	Botany	B.Sc., B.Z.C
42	Plant tissue culture	Botany	B.Sc., B.Z.C
43	Mushroom Cultivation	Botany	B.Sc., B.Z.C
44	Gardening, Landscaping	Botany	B.Sc., B.Z.C
45	Agro Forestry	Botany	B.Sc., B.Z.C
46	SUSTAINABLE AQUACULTURE MANAGEMENT	Zoology	B.Sc., B.Z.C
47	POST HARVEST TECHNOLOGY OF FISH AND FISHERIES	Zoology	B.Sc., B.Z.C

S.No	Name of the New Courses	Department	Program
48	Live Stock Management – I (Biology of Dairy Animals)	Zoology	B.Sc., B.Z.C
49	Live Stock Management – II (Dairy Production and Management)	Zoology	B.Sc., B.Z.C
50	Poultry Management – I (Poultry Farming)	Zoology	B.Sc., B.Z.C
51	Poultry Management – II (Poultry Production and Management)	Zoology	B.Sc., B.Z.C
52	Seri Culture – I	Zoology	B.Sc., B.Z.C
53	Seri Culture – II	Zoology	B.Sc., B.Z.C
54	Tourism and Hospitality Services	History	B.A
55	Tourism Guidance and operating skills	History	B.A
56	Insurance Services	Economics	B.A
57	Banking and Financial Services	Economics	B.A
58	Rural Entrepreneurship	Economics	B.A
59	Farmer producer organization	Economics	B.A
60	Urban Entrepreneurship and MSMEs	Economics	B.A
61	Retail and Digital Marketing	Economics	B.A
62	Inferential statistics and software packages	Economics	B.A
63	Project designing and report writing	Economics	B.A
64	E- Governance	Political Science	B.A
65	Local Administration	Political Science	B.A
66	Digital Marketing	Commerce	B.Com
67	Service Marketing	Commerce	B.Com
68	Management Accounting	Commerce	B.Com
69	Cost Control Techniques	Commerce	B.Com
70	Life Insurance with Practice	Commerce	B.Com
71	General Insurance with Practice	Commerce	B.Com
72	Advanced Corporate Accounting	Commerce	B.Com
73	Advertising and Media Planning	Commerce	B.Com
74	Software Solutions to Accounting	Commerce	B.Com

S.No	Name of the New Courses	Department	Program
75	Sales Promotion and Practice	Commerce	B.Com
76	Logistics Services and Practice	Commerce	B.Com
77	Income Tax Procedure & Practice	Commerce	B.Com
78	EXIM Procedure and practice	Commerce	B.Com
79	GST Procedure & Practice	Commerce	B.Com
80	Stock Markets	Commerce	B.Com
81	E Commerce	Commerce	B.Com
82	Stock Market Analysis	Commerce	B.Com
83	E filing	Commerce	B.Com
84	Advanced Accounting	Commerce	B.Com(CA)
85	Business Statistics	Commerce	B.Com(CA)
86	PROGRAMMING WITH C and C++	Commerce	B.Com(CA)
87	Corporate Accounting	Commerce	B.Com(CA)
88	Cost and Management Accounting	Commerce	B.Com(CA)
89	Income Tax	Commerce	B.Com(CA)
90	Business Law	Commerce	B.Com(CA)
91	Auditing	Commerce	B.Com(CA)
92	DATA BASE MANAGEMENT SYSTEMS	Commerce	B.Com(CA)
93	Principles of seed technology	Agriculture	B.Voc
94	Disease of field crops and their management	Agriculture	B.Voc
95	Weed Management	Agriculture	B.Voc
96	Principles of Land scape gardening	Agriculture	B.Voc
97	Principles of seed technology	Sustainable Agriculture	B.Voc
98	Disease of field crops and their management	Sustainable Agriculture	B.Voc
99	Weed Management	Sustainable Agriculture	B.Voc
100	Principles of Land scape gardening	Sustainable Agriculture	B.Voc
101	Principles of Agronomy	Agriculture and Rural Development	B.Sc
102	Fundamentals of Horticulture	Agriculture and Rural Development	B.Sc

S.No	Name of the New Courses	Department	Program
103	fundamentals of rural sociology and agriculture psychology	Agriculture and Rural Development	B.Sc
104	Fundamentals of Soilsience	Agriculture and Rural Development	B.Sc
105	Principles of Genetics of Plant breeding	Agriculture and Rural Development	B.Sc
106	fundamentals of agriculture extension	Agriculture and Rural Development	B.Sc
107	Fishery By-Products	Industrial Aquaculture and Fisheries	B.Voc
108	Aquaculture engineering	Industrial Aquaculture and Fisheries	B.Voc
109	fisheries management, economics & Marketing	Industrial Aquaculture and Fisheries	B.Voc
110	Fishery By-Products	commercial Aquaculture	B.Voc
111	Aquaculture engineering	commercial Aquaculture	B.Voc
112	Fish Processing Technology and quality control	commercial Aquaculture	B.Voc
113	Aquatic Pollution	commercial Aquaculture	B.Voc
114	Zoology (live stock management I)	commercial Aquaculture	B.Voc
115	Zoology (live stock management II)	commercial Aquaculture	B.Voc
116	Introduction to Micro biology and microbial diversity	Food Technology	B.Sc Food Technology
117	Microbial physiology and bio chemistry	Food Technology	B.Sc Food Technology
118	nutrition in health	Food Technology	B.Sc Food Technology
119	community nutrition	Food Technology	B.Sc Food Technology
120	Bakery and confectionery	Food Technology	B.Sc Food Technology
121	plant food technology	Food Technology	B.Sc Food Technology
122	dietetics	Food Technology	B.Sc Food Technology
123	food packaging	Food Technology	B.Sc Food Technology
124	Animal Food Technology	Food Technology	B.Sc Food Technology
125	Food Quality and analysis	Food Technology	B.Sc Food Technology
126	Machine learning using python	Software Development	B.Voc

S.No	Name of the New Courses	Department	Program
127	Database Management systems	Software Development	B.Voc
128	Cyber security and Malware analysis	Software Development	B.Voc
129	Internet of things	Software Development	B.Voc
130	Mobile application development	Software Development	B.Voc
131	data ware Housing and data mining	Software Development	B.Voc
132	Computer Essential for Data Science	Data Science	BCA
133	Problem solving and Programming Using "C"	Data Science	BCA
134	Numerical and Statistical Methods	Data Science	BCA
135	Data Structures	Data Science	BCA
136	Data Base management system	Data Science	BCA
137	Statistical methods and their applications	Data Science	BCA
138	Product and brand management	BBA	BBA Digital Marketing
139	Sales Management	BBA	BBA Digital Marketing
140	Marketing of Services	BBA	BBA Digital Marketing
141	Retail Management	BBA	BBA Digital Marketing
142	Advertising Management	BBA	BBA Digital Marketing
143	Media Management	BBA	BBA Digital Marketing
144	Advanced SEO	BBA	BBA Digital Marketing
145	Web Analytics	BBA	BBA Digital Marketing
146	Content Marketing	BBA	BBA Digital Marketing
147	Content Management System	BBA	BBA Digital Marketing
148	SEM Rush	BBA	BBA Digital Marketing
149	Google Search console	BBA	BBA Digital Marketing
150	HTML & CSS	BBA	BBA Digital Marketing

S.No	Name of the New Courses	Department	Program
151	Web Designing and Planing	BBA	BBA Digital Marketing
152	Mobile Marketing	BBA	BBA Digital Marketing
153	E-Mail Marketing	BBA	BBA Digital Marketing
154	Video editing	BBA	BBA Digital Marketing
155	Photography and image editing	BBA	BBA Digital Marketing

A. Ch. [Signature]
IQAC Coordinator

CO-ORDINATOR
IQAC
Ideal College of Arts & Sciences (A)
KAKINADA

T. Subramanya
Principal
Principal
Ideal College of Arts & Sciences (A)
KAKINADA

IDEAL COLLEGE OF ARTS & SCIENCES: KAKINADA

(Autonomous & NAAC B)

Dr. P.V.N.RAJU VIDYAPRANGANAM

B.A./B.Sc. Mathematics COURSE STRUCTURE 2022-23

Semester	Paper	Subject	Hrs	Credits	IA	ES	Total
FIRST YEAR							
SEMESTER I	Paper-I	Differential Equations & Differential Equations Problem Solving Sessions	6	5	40	60	100
SEMESTER II	Paper-II	Solid Geometry & Solid Geometry Problem Solving Sessions	6	5	40	60	100
First Internship							
SECOND YEAR							
SEMESTER III	Paper-III	Abstract Algebra & Abstract Algebra Problem Solving Sessions	6	5	30	70	100
		APSCHE Life Skills Courses Analytical Skills	2	2	-	50	50
SEMESTER IV	Paper-IV	Real Analysis & Real Analysis Problem Solving Sessions	6	5	30	70	100
	Paper-V	Linear Algebra & Real Analysis Problem Solving Sessions	6	5	30	70	100
Second Internship							
THIRD YEAR							
SEMESTER V	Paper- VI (A)	Numerical Methods	6	5	30	70	100
	Paper- VII (A)	Mathematical Special Functions	6	5	30	70	100
	(Or)						
SEMESTER V	Paper- VI (B)	Multiple integrals and Applications of Vector Calculus	6	5	30	70	100
	Paper- VII (B)	Integral transforms with Applications	6	5	30	70	100

(Or)							
	Paper- VI (C)	Partial Differential Equations and Fourier Series	6	5	30	70	100
	Paper-VII (C)	Number theory	6	5	30	70	100

SEMESTER VI

Third internship

*Candidate has to choose only one pair from VI(A)&VII(A) or VI(B)&VII(B) or VI(C)&VII(C)

* First internship (April-May after 1st year examinations): Community Service Project.

* Second Internship (April-May after 2nd year examinations): Apprenticeship / Internship / On the job training / In-house Project / Off-site Project.

* Third internship (5th/6thSemester period): Assessment model for the semester long apprenticeship / on the job training / internships during the VI Semester.

IDEAL COLLEGE OF ARTS AND SCIENCES(A)
PHYSICS COURSE STRUCTURE UNDER CBCS

2022-2023

Year	Semester	Paper	Title	Marks	Credits	
I	I	I	Mechanics, waves and oscillations	100	04	
			Practical	50	01	
		Skill Development	Electrical Appliances	50	02	
	II	II	II	Waves optics	100	04
				Practical	50	01
			Skill Development	Solar Energy	50	02
			Community Service Project	100	04	
II	III	III	Heat and Thermodynamics	100	03	
			Practical	50	02	
	IV	IV	Electricity magnetism & Electronics.	100	04	
			Practical	50	01	
		V	Modern Physics	100	04	
			Practical	50	01	
		Short Term Internship	100	04		
		III	V	6A	Optical Instruments and Optometry	100
	Practical				50	02
	7A			Optical Imaging and Photography	100	03
Practical				50	02	
6B	Low Temperature physics & Refriseration			100	03	
	Practical			50	02	
7B	Solar Energy & Applications			100	03	
	Practical			50	02	
6C	Applications of Electrics & Elecyronics			100	03	
	Practical			50	02	
7C	Electronic Instrumentation			100	03	
	Practical			50	02	
VI		Long Term Internship	200	12		

IDEAL COLLEGE OF ARTS & SCIENCES : KAKINADA

(Autonomous, NAAC Accredited B, Affiliated to ANUR)

Department of Computer Science

Structure of Computer Science Syllabus 2022-2023

Semester	Paper Code	Subject	Hrs./ Week	Credits	IA	ES	Total
I B.Sc. Computer Science Syllabus under CBCS w.e.f. 2020-2021 Batch							
I	C1	Problem Solving in C	4	3	40	60	100
	C1-P	Problem Solving in C Lab	2	2		50	50
II	C2	Data Structures using C	4	3	40	60	100
	C2-P	Data Structures using C Lab	2	2		50	50
		Community Service Project Work (2 months)		4			100
II B.Sc. Computer Science Syllabus under CBCS w.e.f. 2020-2021 Batch							
III	C3	Database Management Systems	4	3	30	70	100
	C3-P	Database Management Systems Lab	2	2		50	50
	C4	Object Oriented Programming using Java	4	3	30	70	100
IV	C4-P	Object Oriented Programming using Java Lab	2	2		50	50
	C5	Operating Systems	4	3	30	70	100
	C5-P	Operating Systems Lab using C/Java	2	2		50	50
		Short-term Internship (2 months)		4			100
Skill Enhancement Courses (SECs)							
III B.Sc. Computer Science Syllabus under CBCS w.e.f. 2020-2021 Batch							
	6A	Web Interface Designing Technologies	3	3	30	70	100
	6A-P	Web Interface Designing Technologies Lab	3	2		50	50
	7A	Web Applications Development using PHP& MYSQL	3	3	30	70	100
	7A-P	Web Applications Development using PHP& MYSQL Lab	3	2		50	50
V	6B	Internet of Things	3	3	30	70	100
	6B-P	Internet of Things Lab	3	2		50	50
	7B	Application Development using Python	3	3	30	70	100
	7B-P	Application Development using Python Lab	3	2		50	50
	6C	Data science	3	3	30	70	100
	6C-P	Data science Lab	3	2		50	50
	7C	Python for Data science	3	3	30	70	100
	7C-P	Python for Data science Lab	3	2		50	50
VI		Long-term Internship (6 months)		12			200

IDEAL COLLEGE OF ARTS AND SCIENCES(A)
CHEMISTRY COURSE STRUCTURE UNDER CBCS

2022-2023

Year	Semester	Paper	Title	Marks	Credits	
I	I	I	Inorganic and Physical Chemistry	100	03	
			Practical - I	50	02	
	II	II	Organic and General chemistry	100	03	
			Practical - II	50	02	
			Community Service Project	100	04	
II	III	III	Organic chemistry and Spectroscopy	100	03	
			Practical - III	50	02	
	IV	IV	Inorganic, Organic and Physical chemistry	100	03	
			Practical - IV	50	02	
		V	V	Inorganic and Physical Chemistry	100	03
				Practical - V	50	02
			Short Term Internship	100	04	
III	V Any one Pair of VI & VII A, B, C,D,E	VI - A	Synthetic Organic Chemistry	100	03	
			Practical - VI - A	50	02	
		VII - A	VII - A	Analysis of Organic Compounds	100	03
				Practical - VII - A	50	02
		VI - B	VI - B	Analytical methods in Chemistry - 1	100	03
				Practical - VI - B	50	02
		VII - B	VII - B	Analytical methods in Chemistry - 2	100	03
				Practical - VII - B	50	02
		VI - C	VI - C	Industrial Chemistry - 1	100	03
				Practical - VI - C	50	02
		VII - C	VII - C	Industrial Chemistry - 2	100	03
				Practical - VII - C	50	02
		VI - D	VI - D	Environmental Chemistry	100	03
				Practical - VI - D	50	02
		VII - D	VII - D	Green Chemistry and Nano Technology	100	03
				Practical - VII - D	50	02
		VI - E	VI - E	Analytical methods in Chemistry	100	03
				Practical - VI - E	50	02
		VII - E	VII - E	Cosmetics and Pharmaceutical Chemistry	100	03
				Practical - VII - E	50	02
VI			Long Term Internship	200	12	

IDEAL COLLEGE OF ARTS AND SCIENCES(A)
BOTANY COURSE STRUCTURE UNDER CBCS

2022-2023

Year	Semester	Paper	Title	Hours/ Week	Max. Marks(SEE)	Marks in CIA	Credits
I	I	I	Fundamentals of Microbes and Non-Vascular Plants	04	60	40	03
			Fundamentals of Microbes and Non-Vascular Plants - Lab	03	Max.Marks-50 internal assessment at semester end		02
	II	II	Basics of Vascular Plants and Phytogeography	04	60	40	03
			Basics of Vascular Plants and Phytogeography - Lab	03	Max.Marks-50 External assessment at semester end		02
			Community Service Project	—	100		04
	II	III	III	Anatomy and Embryology of Angiosperms, Plant Ecology and Biodiversity	04	70	30
Anatomy and Embryology of Angiosperms, Plant Ecology and Biodiversity - Lab				03	Max.Marks-50 internal assessment at semester end		02
IV		IV	Plant Physiology and Metabolism	04	70	30	03
			Plant Physiology and Metabolism - Lab	03	Max.Marks-50 External		02
		V	V	Cell Biology, Genetics and Plant Breeding	04	70	30
Cell Biology, Genetics and Plant Breeding - Lab				03	Max.Marks-50 External assessment at semester end		02
Short Term Internship			—	100		04	
		VI (A)	VI (A)	Plant Propagation	04	70	30
	Plant Propagation - Lab			03	Max.Marks-50 External		02
	VII (A)	VII (A)	Seed Technology	04	70	30	03
			Seed Technology - Lab	03	Max.Marks-50 External assessment at semester end		02

Year	Semester	Paper	Title	Hours/ Week	Max. Marks(SEE)	Marks in CIA	Credits		
III	V	VI (B)	Vegetable crops-cultivation Practice	04	70	30	03		
			Vegetable crops-cultivation Practice - Lab	03	Max.Marks-50 External		02		
		VII (B)	Vegetable crops-post harvest practices	04	70	30	03		
			Vegetable crops-post harvest practices - lab	03	Max.Marks-50 External		02		
		VI (C)	Plant tissue culture	04	70	30	03		
			Plant tissue culture - Lab	03	Max.Marks-50 External assessment at semester end		02		
		VII (C)	Mushroom Cultivation	04	70	30	03		
			Mushroom Cultivation - Lab	03	Max.Marks-50 External assessment at semester end		02		
		VI (D)	Gardening, Landscaping	04	70	30	03		
			Gardening, Landscaping - lab	03	Max.Marks-50 External assessment at semester end		02		
		VII (D)	Agro Forestry	04	70	30	03		
			Agro Forestry - Lab	03	Max.Marks-50 External assessment at semester end		02		
			VI		Long Term Internship	-	200		12

IDEAL COLLEGE OF ARTS & SCIENCES

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Dr. PVN RAJU VIDYAPRANGANAM
Samalkot Road, KAKINADA

ZOOLOGY COURSE STRUCTURE UNDER CBCS 2022-2023

YEAR	SEMESTER	PAPER	TITLE	MARKS	CREDI TS	
I	I	I	Animal Diversity – Biology of Non - chordates	100	03	
			Practical - I	50	02	
	II	II	Animal Diversity – Biology of chordates	100	03	
			Practical - II	50	02	
				Community Service Project	100	04
	II	III	III	Cell biology, Genetics, Molecular Biology & Evolution	100	03
Practical - III				50	02	
IV		IV	Animal Physiology, cellular metabolism and embryology	100	03	
			Practical - IV	50	02	
		V	Immunology & Animal Biotechnology	100	03	
			Practical - V	50	02	
			Short Term Internship	100	04	
III		V	VIA	Sustainable Aquaculture Management	100	03
			Practical	50	2	
	VIIA		Post-Harvest Technology of Fish and Fisheries	100	03	
			Practical	50	2	
	(OR)					
	V	VIB	Live Stock Management – I (Biology of Dairy Animals)	100	03	
			Practical	50	2	
		VIIB	Live Stock Management – II (Dairy Production and Management)	100	03	

III	(OR)					
	V	VIC	Poultry Management – I (Poultry Farming)	100	03	
			Practical	50	2	
	VIIC	VIIC	Poultry Management – II (Poultry Production and Management)	100	03	
			Practical	50	2	
	(OR)					
	V	VID	Seri Culture – I	100	03	
			Practical	50	2	
		VIID	VIID	Seri Culture – II	100	03
				Practical	50	2
VI		Long Term Internship	200	12		

**IDEAL COLLEGE OF ARTS AND SCIENCES(A)
HISTORY COURSE STRUCTURE UNDER CBCS**

2022-2023

Year	Semester	Title	Max. Marks	Credits
I	I	ANCIENT INDIAN HISTORY & CULTURE	100	04
	II	Medieval Indian History & Culture	100	04
		Community Service Project	100	04
II	III	Modern Indian History	100	04
	IV	History and Culture of Andhra		
		History of Modern World	100	04
		Short Term Internship	100	04
III	V	Tourism and Hospitality Services	100	04
		Tourism Guidance and operating skills	100	04
		Long Term Internship	200	12

IDEAL COLLEGE OF ARTS AND SCIENCES

(Autonomous & NAAC B)

Dr.P.V.N.RAJU VIDYAPRANGANAM

Samalkot Road – Kakinada

DEPARTMENT OF ECONOMICS**B.A ECONOMICS COURSE STRUCTURE 2022-2023**

YEAR	Course	Semester	Title of the Paper	Hours / Week	Credits	Marks		
						Internals	Semester	
First Year	1	I	Micro Economics Analysis	5	4	40	60	
	2	II	Macro Economics Analysis	5	4	40	60	
			Community Service Project		4	100		
Second Year	3	III	Development Economics	5	4	30	70	
	4	IV	Economic Development in India and Andhra Pradesh	5	4	30	70	
	5	IV	Statistical Methods for Economics	5	4	30	70	
			Short Term Internship		4	100		
Third Year	6A	V	Rural Entrepreneurship	5	4	25	75	
	7A	V	Farmer Producer Organisation	5	4	25	75	
	(OR)							
	6B	V	Urban Entrepreneurship and MSMEs	5	4	25	75	
	7B	V	Retail and Digital Marketing	5	4	25	75	
	(OR)							
	6C	V	Insurance Services	5	4	25	75	
	7C	V	Banking and Financial Services	5	4	25	75	
	(OR)							
	6D	V	Inferential Statistics and Software Packages	5	4	25	75	
	7D	V	Project Designing and Report Writing	5	4	25	75	
		VI	Long Term Internship		12	200 Marks		

IDEAL COLLEGE OF ARTS AND SCIENCES(A)
POLITICAL SCIENCE COURSE STRUCTURE UNDER CBCS
2022-2023

Year	Semester	Title	Max. Marks	Credits
I	I	Introduction to Political Science	100	04
	II	Basic Organs of the Government	100	04
		Community Service Project	100	04
II	III	Indian Government and Politics	100	04
	IV	Indian Political Process		
		Western Political Thought	100	04
		Short Term Internship	100	04
III	V	E - Governance	100	04
	VI	Local Administration	100	04
		Long Term Internship	200	12

IDEAL COLLEGE OF ARTS AND SCIENCES(A)
COMMERCE COURSE STRUCTURE UNDER CBCS

2022-2023

Year	Semester	course No	Title	Max. Marks	Credits
I	I	1A	Fundamentals of Accounting	100	04
		1B	Business Organization and Management	100	04
		1C	Business Environment	100	04
	II	2A	Financial Accounting	100	04
		2B	Business Economics	100	04
		2C	Banking Theory & Practice	100	04
			Community Service Project	100	04
II	III	3A	Advanced Accounting	100	04
		3B	Business Statistics	100	04
		3C	Marketing	100	04
	IV	4A	Corporate Accounting	100	04
		4B	Cost and Management Accounting	100	04
		4C	Income Tax	100	04
		4D	Business Laws	100	04
		4E	Auditing	100	04
		4F	Goods and service tax	100	04
			Short Term Internship	100	04
III	V	16A	Advanced Corporate Accounting	100	04
		16B	Advertising and Media Planning	100	04
		16C	Digital Marketing	100	04
		17A	Software Solutions to Accounting	100	04
		17B	Sales Promotion and Practice	100	04
		17C	Service Marketing	100	04
		18A	Management Accounting	100	04
		18B	Logistics Services and Practice	100	04
		18C	Income Tax Procedure & Practice	100	04
		19A	Cost Control Techniques	100	04
		19B	EXIM Procedure and practice	100	04
		19C	GST Procedure & Practice	100	04
		20A	Stock Markets	100	04
		20B	Life Insurance with Practice	100	04
		20C	E Commerce	100	04
		21A	Stock Market Analysis	100	04
		21B	General Insurance with practice	100	04
		21C	E filing	100	04
		VI		LONG TERM INTERNSHIP	200

IDEAL COLLEGE OF ARTS AND SCIENCES
(A.P. GOVT., AIDED, AUTONOMOUS & NAAC B)
DR.P.V.N. RAJU VIDYAPRANGANAM, KAKINADA
B. Voc Agriculture Syllabus (w.e.f:2020-21A.B)

Skill Enhancement Courses (SECs) for Semester -V,
From 2022-23(Syllabus-Curriculum)

Structure of SECs for Semester-V

(To choose One pair from the Four alternate pairs of SECs)

Semester No,	Course No.	Course Name	Course type (T/L/P)	Hrs./week	Credits	Max. Marks Cont/Int/Mid Assessment	Max. Marks Sem-end Exam	Total
THIRD YEAR								
SEMESTER -V	1	Analytical Methods in Chemistry – 1 (Elective from common B.Sc. syllabus) *	T	4	4	30	70	100
	2	Analytical Methods in Chemistry - 1(Elective from common B.Sc. syllabus) *	P	2	1	-	50	50
	3	Analytical Methods in Chemistry – 2(Elective from common B.Sc. syllabus) *	T	4	4	30	70	100
	4	Analytical Methods in Chemistry – 2 (Elective from common B.Sc. syllabus) *	P	2	1	-	50	50
	5	Principles of seed technology	T	4	4	30	70	100
	6	Principles of seed technology	P	2	1	-	50	50
	7	Disease of field crops and their management	T	4	4	30	70	100
	8	Disease of field crops and their management	P	2	1	50	50	50
	9	Weed management	T	4	4	30	70	100
	10	Weed management	P	2	1	-	50	50
	11	Plant biotechnology / & Landscaping	T	4	4	30	70	100
	12	On Job Training	P	2	1	-	50	50
	Total			36	30		50	900

(Signature)

A.S. Chintamani

D. Rishitha

IDEAL COLLEGE OF ARTS AND SCIENCES
(A.P. GOVT., AIDED, AUTONOMOUS & NAAC B)
DR.P.V.N. RAJU VIDYAPRANGANAM, KAKINADA
B. Voc Sustainable Agriculture Syllabus (w.e.f:2020-21A.B)

Skill Enhancement Courses (SECs) for Semester -V,
From 2022-23(Syllabus-Curriculum)

Structure of SECs for Semester-V

(To choose One pair from the Four alternate pairs of SECs)

Semester No,	Course No.	Course Name	Course type (T/L/P)	Hrs./week	Credits	Max. Marks Cont/Int/Mid Assessment	Max. Marks Sem-end Exam	Total
THIRD YEAR								
SEMESTER -V	1	Analytical Methods in Chemistry – 1 (Elective from common B.Sc. syllabus) *	T	4	4	30	70	100
	2	Analytical Methods in Chemistry - 1(Elective from common B.Sc. syllabus) *	P	2	1	-	50	50
	3	Analytical Methods in Chemistry – 2(Elective from common B.Sc. syllabus) *	T	4	4	30	70	100
	4	Analytical Methods in Chemistry – 2 (Elective from common B.Sc. syllabus) *	P	2	1	-	50	50
	5	Principles of seed technology	T	4	4	30	70	100
	6	Principles of seed technology	P	2	1	-	50	50
	7	Disease of field crops and their management	T	4	4	30	70	100
	8	Disease of field crops and their management	P	2	1	50	50	50
	9	Weed management	T	4	4	30	70	100
	10	Weed management	P	2	1	-	50	50
	11	Principles of Landscape Gardening	T	4	4	30	70	100
	12	On Job Training	P	2	1	-	50	50
	Total			36	30			900

BSA

Deep
C. Sankaraj
D. Rishitha

IDEAL COLLEGE OF ARTS AND SCIENCES
DR. P.V.N. RAJU VIDYAPRANGANAM, KAKINADA

Course: B. Sc Agriculture and Rural Development

Course structure and syllabi:

w.e from 2022-23 Admitted Batch

Semester -I

S. No	Name of the Subject	Total Marks	Mid. Sem Exam	Sem. End Exam	Teaching Hours	Credits
1	English	100	40	60	4	3
2	Telugu	100	40	60	4	3
3	BCA, Life Skill PLANT NURSERy	50	---	50	2	2
4	Skill Development	50	---	50	2	2
5	Principles of Agronomy	100	40	60	4	4
6	Fundamentals of Horticulture	100	40	60	4	4
7	Fundamentals of rural sociology and Educational Psychology	100	40	60	4	4
8	Principles of Agronomy (Practical)	50	---	50	2	1
9	Fundamentals of Horticulture (Practical)	50	---	50	2	1
10	Fundamentals of rural sociology and Educational Psychology (Practical)	50	---	50	2	1
		750	200	550	30	25

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U.S. Priya
G.V.V. Sai Pradeep

IDEAL COLLEGE OF ARTS AND SCIENCES
DR. P.V.N. RAJU VIDYAPRANGANAM, KAKINADA

Course: B. Sc Agriculture and Rural Development

Course structure and syllabus:

w.e from 2022-23 Admitted Batch

Semester -II

S. No	Name of the Subject	Total Marks	Mid. Sem Exam	Sem. End Exam	Teaching Hours	Credits
1	English	100	40	60	4	3
2	Telugu	100	40	60	4	3
3	Life skill	50	---	50	2	2
4	Skill development Skill	50 50	---	50	2	2
5	Fundamentals of Soil Science	100	40	60	4	4
6	Principles of genetics and plant Breeding	100	40	60	4	4
7	Fundamentals of Agriculture Extension	100	40	60	4	4
8	Fundamentals of Soil Science Practical	50	---	50	2	1
9	Principles of genetics and plant Breeding Practical	50	---	50	2	1
10	Fundamentals of Agriculture Extension Practical	50	---	50	2	1
11	TOTAL	800	200	550	32	27

Ref

BS

U.S. Priya
G.V.V. Sri Perampal

IDEAL COLLEGE OF ARTS AND SCIENCES(A)
Bachelor of Vocational: INDUSTRIAL AQUACULTURE AND FISHERIES
Course structure and syllabi: w.e from 2022-2023 Admitted Batch
B.Voc. INDUSTRIAL AQUACULTURE AND FISHERIES
Semester V, from 2022-23
(Syllabus-Curriculum)

III Year; Semester V								
S e m	Course no	Course name	Course type (T/L/P)	Hrs/Week (Sciences 4+2)	Credits (Science 4+1)	Each course Evaluation		
						MID	SEM	Total
V	1	Zoology (live stock management I) *	T	4	4	30	70	100
	2	Zoology (practical) *	L	2	1	0	50	50
	3	Zoology (live stock management II) *	T	4	4	30	70	100
	4	Zoology (practical) *	L	2	1	0	50	50
	5	Fishery By-Products	T	4	4	30	70	100
	6	Fishery By-Products Practical	L	2	1	0	50	50
	7	Fish Processing Technology and Quality Control	T	4	4	30	70	100
	8	Fish Processing Technology and Quality Control Practical	L	2	1	0	50	50
	9	Aquaculture Engineering	T	4	4	30	70	100
	10	Aquaculture Engineering Practical	L	2	1	0	50	50
	11	Fisheries management, economics and marketing (No Practical)	T	4	4	30	70	100
	12	On Job Training	L	2	1	0	50	50
		Total		36	30			900

SEMESTER VI

THIRD INTERNSHIP

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22/12/22

IDEAL COLLEGE OF ARTS AND SCIENCES(A)
Bachelor of Vocational: Commercial aquaculture
Course structure and syllabi: w.e from 2022-2023 Admitted Batch
B.Voc. Commercial aquaculture

Semester V, from **2022-23**
(Syllabus-Curriculum)

III Year; Semester V								
S e m	Course no	Course name	Course type (T/L/P)	Hrs/Week (Sciences 4+2)	Credits (Science 4+1)	Each course Evaluation		
						MID	SEM	Total
V	1	Zoology (live stock management I) * → 135B	T	4	4	30	70	100
	2	Zoology (practical) * → 135C	L	2	1	0	50	50
	3	Zoology (live stock management II) *	T	4	4	30	70	100
	4	Zoology (practical) *	L	2	1	0	50	50
	5	Fishery By-Products	T	4	4	30	70	100
	6	Fishery By-Products Practical	L	2	1	0	50	50
	7	Fish Processing Technology and Quality Control	T	4	4	30	70	100
	8	Fish Processing Technology and Quality Control Practical	L	2	1	0	50	50
	9	Aquaculture Engineering	T	4	4	30	70	100
	10	Aquaculture Engineering Practical	L	2	1	0	50	50
	11	Aquatic Pollution (No Practical)	T	4	4	30	70	100
	12	On Job Training	L	2	1	0	50	50
		Total		36	30			900

IDEAL COLLEGE OF ARTS AND SCIENCES

(Autonomous & NAAC-B)

DR.P.V.N RAJU VIDYAPRANGANAM

KAKINADA-533002

Department of Food Science and Technology

Course structure under CBCS (2022-23)

B.Sc. Food Technology

Year	Semester	Title	Max.Marks	Credits
I	I	Food production trends	100	04
		Chemistry 1	100	04
		Microbiology 1	100	04
	II	Basic principles of food preservation	100	04
			Chemistry 2	100
		Microbiology 2	100	04
		Community service project	100	04
II	III	Unit operations and material handling	100	04
		Chemistry 3	100	04
		Nutrition in health	100	04
	IV	Food quality management	100	04
		Chemistry 4	100	04
		Community nutrition	100	04
		Food additives	100	04
		Chemistry 5	100	04
		Food packaging	100	04
		apprenticeship	100	04
III	V	Bakery and confectionary	100	04
		Plant food technology	100	04
		Dietetics	100	04
		Food packaging	100	04
		Animal food technology	100	04
		Food quality and analysis	100	04
	VI	LONG TERM INTERNSHIP (6 months)	200	12

P. V. N. Raju

IDEAL COLLEGE OF ARTS AND SCIENCES
KAKINADA

Department of Computer Science

Course structure and syllabi: w. e. from 2020 -21 Admitted Batch.

B.Voc - Software Development (Third Year).

Semester - V

Structure of SECs for Semester-V

(To choose One pair from the Four alternate pairs of SECs)

S. No.	Paper Code	Subject	Hours per week	Credits	Max. Marks		Total Marks
					Internal	External (University Exams)	
1	SD-51	Machine Learning Using Python	4	4	30	70	100
	SD-51P(Lab)	ML Using Python Lab	2	1	--	50	50
2	SD-52	Database Management Systems	4	4	30	70	100
	SD-52P(Lab)	Database Management Systems Lab	2	1	--	50	50
3	SD-53	Cyber Security and Malware Analysis	4	4	30	70	100
	SD-53P(Lab)	Cyber Security and Malware Analysis Lab	2	1	--	50	50
4	SD-54	Internet of Things	4	4	30	70	100
	SD-54P(Lab)	Internet of Things Lab	2	1	--	50	50
5	SD-55	Mobile Application Development	4	4	30	70	100
	SD-55P(Lab)	Mobile Application Development Lab	2	1	--	50	50
6	SD-56	Data ware Housing and Data Mining	4	4	30	70	100
	SD-56P(Lab)	Data ware Housing and Data Mining Lab.	2	1	--	50	50
TOTAL			36	30	180	720	900

- 1) Note: FIRST and SECOND PHASES (2 spells) of APPRENTICESHIP between 1st and 2nd year and between 2nd and 3rd year (two summer vacations)

- 2) THIRD PHASE of APPRENTICESHIP Entire 5th / 6th Semester

Note:- Syllabus Structure old format updated in the Next Page.

G. Subbalakshmi
Danthi
GSRK Thy

P. K. Reddy
CHAIRMAN

UNIVERSITY NOMINEE

IDEAL COLLEGE OF ARTS & SCIENCES (AUTONOMOUS)
Department of Computer Science & Applications
BACHELOR OF COMPUTER APPLICATIONS– DATA SCIENCE

Under CBCS

Course Structure and Scheme of Examination w.e.f. 2022-23

Semester I

Paper Code	Course	Teaching Hours	Sem End Exam	Mid Sem Exam*	Total Marks	Credits
BCA1.1.1	First Language-English-I	4	60	40	100	3
BCA1.1.2	Second Language-Hindi/Sanskrit-I	4	60	40	100	3
BCA1.1.3	Life Skill Course – I (Human Values & Professional Ethics)	2	50	0	50	2
BCA1.1.4	Skill Development Course – I (Electrical Appliances)	2	50	0	50	2
BCA1.1.5	Computer Essentials for Data Science	5	60	40	100	4
BCA1.1.6	Problem Solving and Programming Using “C”	5	60	40	100	4
BCA1.1.7	Numerical and Statistical Methods	5	60	40	100	4
BCA1.1.8	Computer Essentials for Data Science Lab	2	50	0	50	1
BCA1.1.9	Problem Solving and Programming Using “C” Lab	2	50	0	50	1
BCA1.1.10	Numerical and Statistical Methods Lab	2	50	0	50	1
Total		33	550	200	750	25

X G. Subbalakshmi
 Bant
 G. Subbalakshmi

D. V. K. N.
CHAIRMAN


UNIVERSITY NOMINEE

IDEAL COLLEGE OF ARTS & SCIENCES (AUTONOMOUS)

Department of Computer Science & Applications

BACHELOR OF COMPUTER APPLICATIONS- DATA SCIENCE

Under CBCS

Course Structure and Scheme of Examination w.e.f. 2022-23


Semester II

Paper Code	Course	Teaching Hours	Sem End Exam	Mid Sem Exam *	Total Marks	Credits
BCA1.2.1	First Language-English-II	4	60	40	100	3
BCA1.2.2	Second Language-Telugu	4	60	40	100	3
BCA1.2.3	Life Skill Course – II (Information & Communication Technology (ICT))	2	50	0	50	2
BCA1.2.4	Skill Development Course – II (Business Communication)	2	50	0	50	2
BCA1.2.5	Skill Development Course – III (Advertising)	2	50	0	50	2
BCA1.2.6	Data Structures	5	60	40	100	4
BCA1.2.7	Database Management Systems	5	60	40	100	4
BCA1.2.8	Statistical Methods & their Applications	5	60	40	100	4
BCA1.2.9	Data Structures Lab	2	50	0	50	1
BCA1.2.10	Database Management Systems Lab	2	50	0	50	1
BCA1.2.11	Statistical Methods & their Applications Lab	2	50	0	50	1
BCA1.2.12	Internship (Community Service Project)	–	100	0	100	4
Total		35	700	200	900	31

Note: Internship (Community Service Project) Should be completed in between Semester -II and Semester -III. (Summer Vacation)

X C. Subbalakshmi

Dhanu
GSL


CHAIRMAN


UNIVERSITY NOMINEE

IDEAL COLLEGE OF ARTS AND SCIENCES

(A.P. GOVT., AIDED, AUTONOMOUS & NAAC B)

DR. P.V.N. RAJU VIDYAPRANGANAM

KAKINADA

BBA (Digital Marketing) COURSE STRUCTURE)

Semester – V

BBA Digital Marketing V Semester syllabus Skill Enhancement Courses							
Group A Subjects: Management Subjects							
S.NO	COURSE	NAME OF THE SUBJECT	TOTAL MARKS	MID SEM EXAM*	SEM END EXAM	TEACHING HOURS	CREDITS
1	6A	Product & Brand Management	100	30	70	5	4
2	7A	Sales Management	100	30	70	5	4
3	6B	Marketing of Services	100	30	70	5	4
4	7B	Retail Management	100	30	70	5	4
5	6C	Advertising Management	100	30	70	5	4
6	7C	Media Management	100	30	70	5	4
Group B Subjects: Digital Marketing Subjects							
S.NO	COURSE	NAME OF THE SUBJECT	TOTAL MARKS	MID SEM EXAM*	SEM END EXAM	TEACHING HOURS	CREDITS
1	6A	Content Marketing	100	30	70	5	4
2	7A	Content Management System	100	30	70	5	4
3	6B	Advanced SEO	100	30	70	5	4
4	7B	Web Analytics	100	30	70	5	4
5	6C	SEM Rush	100	30	70	5	4
6	7C	Google Search Console	100	30	70	5	4
Group C Subjects: Web Based Applications							
S.NO	COURSE	NAME OF THE SUBJECT	TOTAL MARKS	MID SEM EXAM*	SEM END EXAM	TEACHING HOURS	CREDITS
1	6A	Mobile Marketing	100	30	70	5	4
2	7A	E-Mail Marketing	100	30	70	5	4
3	6B	Video Editing	100	30	70	5	4
4	7B	Photography & Image Editing	100	30	70	5	4
5	6C	HTML & CSS	100	30	70	5	4
6	7C	WebDesign&Planning	100	30	70	5	4

K. An. N. Visal .. J. P. N. ... M. S. ...