



K.S.R.M COLLEGE OF ENGINEERING

UGC-Autonomous
Kadapa, AP
www.ksrmce.ac.in

Dated: 20-09-2021

Lr./KSRMCE/Principal Office /2021-22/

Principal Office Orders

As per the decisions of the Academic Council meeting held on 09-09-2021 the undersigned members are been appointed as the Board of studies for Humanities for a period of 2 years.

S.No.	Name	Designation
1.	Sri. N. Bhaskar Reddy	Asst.Prof in English,KSRMCE
2.	Prof. B. Sreenivasulu	Prof.in Economics,YVU,Kadapa
3.	Dr. M. Rajesh	Asso.Prof,MBA,VIT Vellore
4.	Sri. Dharma Simha Reddy	Alumni
5.	Sri M.C sanjeevaiah	Asst.Prof,KSRMCE
6.	Sri K.Khasim Peera	Asst.Prof,KSRMCE
7.	Sri K.Chiranjeevi	Industry Expert

The orders will come in to force for with immediate effect.

Cc to:

The Management for information
The HoD of H&S for necessary actions
The Members for Information
The Website Committee for upload

V. S. S. Mm/5

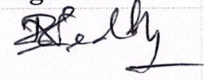
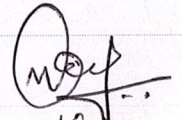
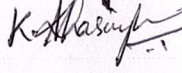
Principal
PRINCIPAL
K.S.R.M. COLLEGE OF ENGINEERING
KADAPA-516005, (A.P.)



BOARD OF STUDIES MEETING – 2021-22
K.S.R.M COLLEGE OF ENGINEERING
AUTONOMOUS

Minutes of the Meeting

Date	22-09-2021	Day	Wednesday
Time	11.30 am – 1.00 pm	Venue	Virtual meeting: http://meet.google.com/gjm4sr3hgz
Dept./SS	Humanities and Sciences (Humanities)	Convener	Sri. N. Bhaskar Reddy

Members Present: 07				Members Absent: 00		
S. No	Name	Designation	Signature	S. No	Name	Designation
1.	Sri. N. Bhaskar Reddy	Assistant Prof., Dept. of Humanities & Sciences KSRMCE				
2.	Prof. B. Srinivasulu	REGISTAR, Dr. Abdul Haqq Urdu University, Kurnool				
3.	Dr. M. Rajesh	Associate Professor, Department of Management, VIT University, Vellore.				
4.	Sri. M. Chinna Sanjeevaiah	Assistant Prof. KSRMCE				
5.	Sri. K. Khasimpeera	Assistant Prof. KSRMCE				
6.	Sri. Chiranjeevi	Industry person				
7.	Sri. D. Dharma Simha Reddy	Assistant Professor, AITS, Rajampeta (Alumni)				

Sri. N. Bhaskar Reddy, welcomed all the members to the meeting and presented the agenda of the meeting.

The resolutions are:

	Todo item	Discussion	Resolution	Coordinator/in-charge
1	To finalize the curriculum and syllabus for III & IV Sem B.Tech under R20 Regulations	The Board of Chairman has presented the syllabus designed by the faculty after taking the feedback from all stakeholders and comparing with premier institute syllabus	The committee Suggested for few modifications in the subject Business Economics & accounting for engineers. After the modifications the committee member approved all the syllabus.	Sri. N. Bhaskar Reddy

Sri. N. Bhaskara Reddy, Convener have proposed the Vote of thanks and concluded the meeting.

NBR
Reddy
Convener

HOD H&S

Dr. I. SREEVANI M.Sc., Ph.D.
Head of Humanities & Sciences
K.S.R.M College of Engineering
KADAPA 516 005

Course Title	Business Economics and Accounting for Engineers					B.Tech III Sem (R20) (CSE)		
Course Code	Category	Hours/Week			Credits	Maximum Marks		
2025301	HS	L	T	P	C	Continuous Internal Assessment	End Exams	Total
		3	0	0	3	40	60	100
Mid Exam Duration:90Minutes					End Exam Duration :3Hrs			
COURSE OBJECTIVES:								
<ul style="list-style-type: none"> ➤ To equip the budding engineering student with an understanding of concepts and tools of economic analysis. ➤ To provide knowledge of Business economics through differential economics concepts and theories. ➤ To make aware of accounting concepts to analyze and solve complex problems relating financial matters in industries. ➤ To understand professional and ethical responsibility and ability to communicate effectively. 								
Course Outcomes: On successful completion of this course, the students will be able to								
CO1	Understand the concept of Business Economics and able to apply							
CO2	Understand the Production functions and application of Business Economics and Accounts form a king business decisions.							
CO3	To Analyze the markets conditions and determine price-output relations.							
CO4	To understand the concepts of Accounting and able to prepare the financial statements of the business firm.							
CO5	To evaluate, analyze and interpret the financial performance of business.							

UNIT-I: INTRODUCTION TO BUSINESS ECONOMICS

Meaning, Definition, Nature and scope of Business Economics, Demand Analysis: Concept of Demand, Determinants of demand, Law of Demand and its exceptions, Elasticity of Demand – Types, Measurement of Elasticity of Demand, Demand Forecasting – Techniques of Demand Forecasting.

UNIT-II: THEORY OF PRODUCTION AND COST ANALYSIS

Production Functions: Law of variable proportion, Isoquants and Isocost, leastcost combination of inputs, Returns to Scale and Cobb- Douglas production function. Internal and external economies of scale.

Cost Analysis: Cost concepts – Break-Even Analysis (BEA) – Break Even Point – significance and limitations of BEA.

UNIT-III: CLASSIFICATION OF MARKETS AND PRICING METHODS

Markets structures: Perfect and Imperfect competition-Features of Perfect Competition, Monopoly, Monopolistic Competition and Oligopoly. Price- Output determination under perfect competition, monopoly and monopolistic competition- Price rigidity in Oligopoly.

Methods of Pricing – cost plus pricing, marginal cost pricing, skimming pricing, penetration pricing, differential pricing and administrative pricing.

UNIT-IV: INTRODUCTION TO FINANCIAL ACCOUNTING

Definition to Accounting, objective and need for Accounting, Double Entry Book keeping – Accounting process, Journal Ledger, Trial Balance, and Final Accounts- Trading Account, Profit and Loss Account and Balance sheet with problems.

UNIT-V: FINANCIAL ANALYSIS THROUGH RATIOS

Concept of Financial Ratios , Types of Ratios- Liquidity Ratios, Turnover Ratios, Capital Structure Ratios, Profitability Ratios with problems.

TEXTBOOKS:

1. Introductory Managerial economics for BMS; Mithani DM, PERASON
2. management science :Principles and world wide application, Salvatore Dominick. PEARSON
3. A.Ramachandra Aryasri: Managerial Economics and Financial Analysis, PEARSON
4. Varshney & Maheswari: Managerial Economics, Sultan Chand Publishers, 2009.
5. Prasad and K.V.Rao: Financial Accounting, Jai Bharath Publishers, Vijayawada.
6. A.R.Aryasri: Managerial Economics and Financial Analysis, TATA McGraw-HillPublishingCo.Ltd.

REFERENCES:

1. Managerial economics (Economics tools for todays Decision Makers),PalG.Keat,Philip K.Y. Young, Stephen E.Erfle, Sreejata Banerjee, PEARSON
2. P.LMehtha:Managerial Economics,Sulthan Chand Publishers
3. KKDewett –Managerial Economics, S.Chand Publishers
4. S.PJain&K.LNarang: Financial Accounting, Kalyani publishers.
5. M.SugunathaReddy: Managerial Economics and Financial Analysis, Research India Publ ication,NewDelhi,2013.
6. Paul A Samules on and William nordhaus: Economics, Oxford University Publications.
7. M L Jhingam: Micro Economics & Macro Economics, Vrinda Publacations (P)Ltd.


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KSRM College of Engineering

KADAPATI

Course Title	Business Economics and Accounting for Engineers				B.Tech IV Sem (R20) (CE,ME,EEE&ECE)			
Course Code	Category	Hours/Week			Credits	Maximum Marks		
2025401	HS	L	T	P	C	Continuous Internal Assessment	End Exams	Total
		3	0	0	3	40	60	100
Mid Exam Duration:90Minutes					End Exam Duration :3Hrs			
COURSE OBJECTIVES:								
<ul style="list-style-type: none"> ➤ To equip the budding engineering student with an understanding of concepts and tools of economic analysis. ➤ To provide knowledge of Business economics through differential economics concepts and theories. ➤ To make aware of accounting concepts to analyze and solve complex problems relating financial matters in industries. ➤ To understand professional and ethical responsibility and ability to communicate effectively. 								
Course Outcomes: On successful completion of this course, the students will be able to								
CO1	Understand the concept of Business Economics and able to apply							
CO2	Understand the Production functions and application of Business Economics and Accounts form a king business decisions.							
CO3	To Analyze the markets conditions and determine price-output relations.							
CO4	To understand the concepts of Accounting and able to prepare the financial statements of the business firm.							
CO5	To evaluate, analyze and interpret the financial performance of business.							

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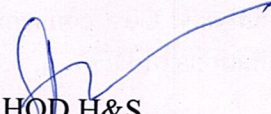
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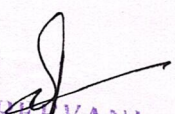
B.Tech. - III Semester

CE

Course Code	Category	Course Title	Hours / Week			IM	EM	CR
			L	T	P			
2021302	BSC	Probability, Statistics & Numerical Methods	3	0	0	40	60	3
2001302	ESC	Geology and Building materials	3	0	1	40	60	3.5
2001303	PCC	Advanced Strength of materials	3	1	0	40	60	4
2001304	PCC	Fluid Mechanics	3	0	0	40	60	3
2001305	PCC	Geomatics	3	0	0	40	60	3
2001306	PCC(LAB)	Fluid Mechanics Laboratory	0	0	3	40	60	1.5
2001307	PCC(LAB)	Geomatics Lab	0	0	3	40	60	1.5
20013S1	SOC	Civil Engineering Workshop (Skill oriented)	1	0	2	40	60	2
Total Credits			16	1	9	320	480	21.5

B.Tech. - IV Semester

Course Code	Category	Course Title	Hours/Week			IM	EM	CR
			L	T	P			
2025401	HSS	Business Economics and Accounting for Engineers	3	0	0	40	60	3
2001402	PCC	Hydraulics & Hydraulic Machinery	3	0	0	40	60	3
2001403	PCC	Soil Mechanics	3	0	0	40	60	3
2001404	PCC	Structural Analysis	3	0	0	40	60	3
2001405	PCC	Transportation Engineering	3	0	0	40	60	3
2001406	BSC(LAB)	Building Planning and Drawing (AutoCAD)	0	0	3	40	60	1.5
2001407	PCC(LAB)	Soil Mechanics Laboratory	0	0	3	40	60	1.5
2001408	PCC(LAB)	Transportation Engineering Laboratory	0	0	3	40	60	1.5
20014S2	SOC	Advanced Civil Engineering Workshop (Skill oriented-2)	1	0	2	40	60	2
2024410	HSMC	Universal Human Values	3	0	0	40	60	3
Total			19	0	11	400	600	24.5


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AIEML

B.Tech. III Sem (R20UG)

S.No.	Course Code	Course Name	Category	Hours per Week			IM	EM	Credits
				L	T	P	40	60	
1	2021301	Probability and Optimization	BSC	3	0	0	40	60	3
2	2039302	Discrete Mathematics & Graph Theory	PCC	3	0	0	40	60	3
3	2039303	Digital Systems and Computer Organization	PCC	3	0	0	40	60	3
4	2039304	Introduction to Artificial Intelligence	PCC	3	0	0	40	60	3
5	2039305	RDBMS	PCC	3	0	0	40	60	3
6	2039306	Skill Course – I (MAT Lab Programming)	SC-I	1	0	2	40	60	2
7	20MC301	Universal Human Values	HSMC	3	0	0	40	60	3
8	2039307	Digital Systems and Computer Organization Lab	PCC LAB	0	0	3	40	60	1.5
9	2039308	RDBMS Lab	PCC LAB	0	0	3	40	60	1.5
10	2039309	Exploratory Data Analysis with R	PCC LAB	0	0	3	40	60	1.5
Total							400	600	24.5

B.Tech. IV Sem (R20UG)

S.No.	Course Code	Course Name	Category	Hours per Week			IM	EM	Credits
				L	T	P	40	60	
1	2021401	Business Economics for Engineers	HSMC	3	0	0	40	60	3
2	2039402	Design and Analysis of Algorithms	PCC	3	0	0	40	60	3
3	2039403	Operating Systems	PCC	3	0	0	40	60	3
4	2039404	Data Science	PCC	3	0	0	40	60	3
5	2039405	Business Intelligence Analyst	PCC	3	0	0	40	60	3
6	2039406	Operating Systems Lab	PCC LAB	0	0	3	40	60	1.5
7	2039407	Data Science Lab	PCC LAB	0	0	3	40	60	1.5
8	2039408	Business Intelligence Analyst Lab	PCC LAB	0	0	3	40	60	1.5
9	2039409	Skill Course – II (Advanced Python Programming)	SC	1	0	2	40	60	2
10	20MC410	Mandatory Course (Disaster Management)	MC	2	1	0	40	---	0
Total							400	540	21.5

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III Semester (Theory - 05, Lab - 03)

EEE

S. No.	Subject Code	SUBJECT	SC	L	T	P	IM	EM	CR
1	2002301	Switching Theory & Logic Design	PCC	3	0	0	40	60	3
2	2002302	Electromagnetic Field Theory	PCC	3	0	0	40	60	3
3	2002303	Electrical Circuit Analysis - II	PCC	3	0	0	40	60	3
4	2002304	Electrical Measurements & Measuring Instruments	PCC	3	0	0	40	60	3
5	2002305	DC Machines & Transformers	PCC	3	0	0	40	60	3
6	2002306	Electrical Circuit Analysis - II Lab	PCC	0	0	3	40	60	1.5
7	2002307	Electrical Measurements & Measuring Instruments Lab	PCC	0	0	3	40	60	1.5
8	2002308	DC Machines & Transformers Lab	PCC	0	0	3	40	60	1.5
9	2002309	Skill Oriented Course	SC	1	0	2	40	60	2
10	2025310	Human Values & Professional Ethics	HSMC	2	0	0	40	60	3
Total				18	00	11	400	600	24.5

IV Semester (Theory - 05, Lab - 03)

S. No.	Subject Code	SUBJECT	SC	L	T	P	IM	EM	CR
1	2021401	Special Functions & Complex Analysis	BSC	3	0	0	40	60	3
2	2025402	Fundamentals of Management for Engineers	HSMC	3	0	0	40	60	3
3	2002403	Induction Motors & Synchronous Machines	PCC	3	0	0	40	60	3
4	2002404	Linear Control Systems	PCC	3	0	0	40	60	3
5	2002405	Power Systems - I	PCC	3	0	0	40	60	3
6	2002406	Induction Motors & Synchronous Machines Lab	PCC	0	0	3	40	60	1.5
7	2002407	Control Systems Lab	PCC	0	0	3	40	60	1.5
8	2005408	Python Programming Lab	ESC	0	0	3	40	60	1.5

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 KADAPA - 516 005


B. Tech. - III semester

ME

Course Code	Category	Course title	Hours / Week			IM	EM	CR
			L	T	P			
2003301	ESC	Fundamentals of Statistics and Dynamics.	3	0	0	40	60	3
2003302	ESC	Fluid Mechanics & Hydraulic Machinery	3	0	0	40	60	3
2003303	PCC	Manufacturing processes	3	0	0	40	60	3
2003304	PCC	Engineering Thermodynamics	3	0	0	40	60	3
2003305	ESC	Mechanics of Materials	3	0	0	40	60	3
2003306	ESC	Fluid Mechanics & Hydraulic Machinery Lab	0	0	3	40	60	1.5
2003307	PCC	Manufacturing Technology Lab	0	0	3	40	60	1.5
2003308	ESC	Mechanics of Materials Lab	0	0	3	40	60	1.5
2003309	SC	Skill oriented course (CATIA)	1	0	2	40		2
			16	1	11	360	480	21.5

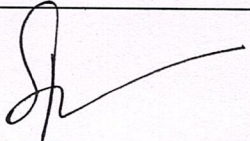
B. Tech. - IV Semester

Course Code	Category	Course title	Hours/Week			IM	EM	CR
			L	T	P			
2025401	HSS	Business Economics and Accounting for Engineers	3	0	0	40	60	3
2021401	BSC	Probability Statics and Numerical methods	3	0	0	40	60	3
2003403	PCC	Applied Thermodynamics .	3	0	0	40	60	3
2003404	PCC	Kinematics of Machines	3	0	0	40	60	3
2025405	PCC	Machine tools	3	0	0	40	60	3
2003406	PCC (LAB)	Applied Thermodynamics lab	0	0	3	40	60	1.5
2003407	PCC (LAB)	Manufacturing Technology Lab-II	0	0	3	40	60	1.5
2003408	PCC (LAB)	Computer Aided Machine Drawing.	0	0	3	40	60	1.5
2003409	SOC	Skill Oriented Course – II CNC Programming and simulation.	1	0	2	40	60	2
2025410	HSMC	Universal Human Values	3	0	0	40	60	3
Total			19	0	11	400	600	24.5


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Semester-III									
S.No	Code	Course Name	Category	L	T	P	IM	EM	Credits
1.	2021301	Special Functions and Complex Analysis	BSC	3	0	0	40	60	3
2.	2004301	Signals and Systems	PC	3	0	0	40	60	3
3.	2004302	Digital System Design	PC	3	0	0	40	60	3
4.	2004303	Analog Circuits	PC	3	0	0	40	60	3
5.	2004304	Network theory	PC	3	0	0	40	60	3
6.	2004305	Simulation Lab	PC	0	0	3	40	60	1.5
7.	2004306	Digital System Design Lab	PC	0	0	3	40	60	1.5
8.	2004307	Analog Circuits Lab	PC	0	0	3	40	60	1.5
9.	20SC308	Python Programming (Skilled Course - I)	SC	1	0	2	40	60	2
10.	2024310	Universal Human Values	HS	3	0	0	40	60	3
Total									24.5

Semester-IV									
S.No	Code	Course Name	Category	L	T	P	IM	EM	Credits
1.	2025401	Business Economics and Accounting for Engineers	BSC	3	0	0	40	60	3
2.	2021403	Probability Theory & Stochastic Processes	PC	3	0	0	40	60	3
3.	2004403	Microprocessors and Microcontrollers	PC	3	0	0	40	60	3
4.	2004404	EM Waves and Transmission Lines	PC	3	0	0	40	60	3
5.	2004405	Linear and Digital IC Applications	PC	3	0	0	40	60	3
6.	2004406	Linear and Digital IC Applications Lab	PC	0	0	3	40	60	1.5
7.	2004407	Microprocessors and Microcontrollers Lab	PC	0	0	3	40	60	1.5
8.	2004408	LabView Programming Lab	PC	0	0	3	40	60	1.5
9.	20SC409	PCB Design (Skilled Course –II)	SC	1	0	2	40	60	2
Total									21.5
Community Service Project(Mandatory) for 6 weeks duration during summer vacation									

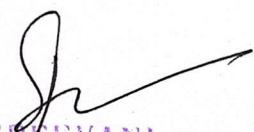

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Department of Computer Science & Engineering

R20 Course Structure

III Semester(Theory-05,Lab-03)

S.No.	Subject Code	SUBJECT	SC	L	T	P	IM	EM	CR
1	2025301	Business Economics and Accountingfor Engineers	HSM C	3	0	0	40	60	3
2	2005302	Advanced Data Structures	PCC	3	0	0	40	60	3
3	2005303	Formal Languages & AutomataTheory	PCC	3	0	0	40	60	3
4	2005304	Object Oriented Programming through JAVA	PCC	3	0	0	40	60	3
5	2005305	Data Base Management Systems	PCC	3	0	0	40	60	3
6	2005306	Advanced Data Structures Lab	PCC	0	0	3	40	60	1.5
7	2005307	JAVA Lab	PCC	0	0	3	40	60	1.5
8	2005308	Data Base Management Systems Lab	PCC	0	0	3	40	60	1.5
9	2005309	Skill Oriented Course Exploring Data Analysis with R	SC	0	0	4	40	60	2.0
Total				15	00	13	400	540	21.5


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