

SPPU –Commerce and Management Faculty			
Batcher in Business Administration - Computer Application (BBA -CA) 2013 pattern to CBCS 2019 pattern --- Course Equivalence			
	2013 pattern		2019 pattern
	SEMESTER I		
101	Modern Operating Environment & MS Office	104	Database Management System
102	Financial Accounting	CA-202	Financial Accounting
103	Programming Principles & Algorithms	103	C Language
104	Business Communication	CA-101	Business Communication
105	Principles of Management	CA-102	Principles of Management
106	Laboratory Course – I [Based on Paper No. 101 & 103]	CA-106	Computer Laboratory Based on as per 2019 pattern (Subject code 104 & 103 code as per 2019 pattern)
	SEMESTER II		SEMESTER II
201	Procedure Oriented Programming using C	CA-103	C Language
202	Data Base Management Systems	CA-104	Database Management System
203	Organizational Behaviour	CA-201	Organization Behaviour & Human Resource Management
204	Computer Applications in Statistics	CA-105	Statistics
205	E-Commerce Concepts	CA-301	Digital Marketing
206	Laboratory Course – II [Based on Paper No. 201 & 202]	CA-206	Computer Laboratory Based on 103 & 104(2 credits each)
	SEMESTER III		SEMESTER III
301	Relational Data Base Management Systems	CA-204	Relational database
302	Data Structures using C	CA-302	Data Structure
303	Operating System Concepts	CA-403	Operating System
304	Business Mathematics	CA-203	Business Mathematics

305	Software Engineering	CA-303	Software Engineering
306	Laboratory Course – III [Based on Paper No. 301 and 302]	CA-306	Computer Laboratory Based on 302 & 204
	SEMESTER IV		SEMESTER IV
401	OOP's using C++	CA-402	Object Oriented Concepts Through CPP
402	Programming in Visual Basic	CA-304 CA-304	Angular JS Or PHP
403	Computer Networking	CA-401	Networking
404	Enterprise Resource Planning	CA-501	Cyber Security
405	Human Resource Management	CA-201	Organization Behaviour & Human Resource Management
406	Laboratory Course – IV [Based on Paper No. 401 & 402]	CA-406	Computer Laboratory Based on 402 & 304
	SEMESTER V		SEMESTER V
501	Java Programming	CA-503	Core Java
502	Web Technologies	CA-205	Web Technology HTML-JS-CSS
503	Dot Net Programming	CA-604 CA-604	Dot Net framework OR Android Programming
504	Object Oriented Software Engg.	CA-502	OOSE
505	Software Project – I [Based on C++ / VB Technology]	CA-505	Project
506	Laboratory Course – V [Based on Paper No. 501 & 502]	CA-506	Computer Laboratory Based on 503 and 604
	SEMESTER VI		SEMESTER VI
601	Advanced Web Technologies	CA-504	Mongo DB OR Python

		CA-504	
602	Advanced Java	CA-603	Advanced Java
603	Recent Trends in IT	CA-601	Recent Trends in Information Technology
604	Software Testing	CA-602	Software Testing
605	Software Project – II [Java / Dot Net Technology]	CA-605	Project
606	Laboratory Course – VI [Based on Paper No. 601 & 602]	CA-606	Computer Laboratory Based on 601 and 602(2 credits each)