

**Vellalar College for Women (Autonomous), Erode - 12.**

**Bachelor of Science in Mathematics with Computer Applications**

**Applicable to students admitted during the academic year 2019-2020 onwards**

**Course Content and Scheme of Examinations (CBCS and OBE Pattern)**

**Semester I**

Part	Study Component	Subject Code	Title of the Paper	Inst. Hrs./ Week	Exam . Dur. Hrs.	Max. Marks			Credit s
						CIA	ESE	Total	
I	Language - I	18TAMU101/ 18HINU101	Tamil / Hindi	6	3	25	75	100	3
II	Language - II	18ENHU101 / 18ENLU101	English	6	3	25	75	100	3
III	Core	18MCUC101/ 18MSUC101	Classical Algebra ©	4	3	25	75	100	4
		18MCUC102/ 18MSUC102	Calculus ©	5	3	25	75	100	4
	Allied - I	19MCUA101/ 18MSUA101	Statistics for Mathematics - I ©	5	3	20	55	75	4
		19MCUAP01/ 18MSUAP01	Allied Practical- Mathematical Software - I ©	2	3	-	25	25	1
IV	Foundation Course	18FOCU1ES	Environmental Studies	2	3	-	100	100	2
Total								600	21

**Semester II**

I	Language – I	18TAMU202/ 18HINU202	Tamil / Hindi	6	3	25	75	100	3
II	Language – II	18ENHU202/ 18ENLU202	English	6	3	25	75	100	3
III	Core	18MSUC203 / 18MCUC203	Differential Equations and Laplace Transforms©	4	3	25	75	100	4
		19MCUC204/ 18MSUC204	Trigonometry, Vector Calculus and Fourier Series©	3	3	20	55	75	3
		19MCUCP01/ 18MSUCP01	Core Practical- Mathematical Software-II ©	2	3	-	25	25	1
	Allied - I	19MCUA202/ 18MSUA202	Statistics for Mathematics - II ©	7	3	25	75	100	5
IV	Value Education	18VEDU2HR	Value Education and Human Rights	2	3	-	100	100	2
Total								600	21

Semester III										
Part	Study Component	Subject Code	Title of the Paper	Inst. Hrs./ Week	Exam. Dur. Hrs.	Max. Marks			Credits	
						CIA	ESE	Total		
III	Core	18MCUC305	Analytical Geometry	6	3	25	75	100	5	
		18MCUC306	Mechanics	6	3	25	75	100	5	
		18MCUC307	C - Programming Theory	3	3	25	75	100	2	4
		18MCUCP01/ 19MCUCP02	C - Programming Practical	3	3	40	60	100	2	
	Allied - II	18PHUA303	Physics - I (Theory)	5	3	20	55	75	4	
		18PHUA101	Physics - I (Practical )	2	-	-	-	-		
IV	Skill Based Subject - I	18MCUSP01/ 18MSUSP01	Documentation Package - LATEX (Practical) ©	3	3	40	60	100	3	
	Basic Tamil			2	-	100	-	100	2	
	Advanced Tamil				3	25	75			
	Non Major Elective - I	18MCUN301	Fundamentals of Mathematics		3	-	100			
Total								675	23	
Semester IV										
III	Core	18MCUC408	Linear Algebra	5	3	25	75	100	4	
		18MCUC409	Foundation Course in Mathematics	6	3	25	75	100	5	
		18MCUC410	Object Oriented Programming with C++ (Theory )	4	3	25	75	100	3	5
		18MCUCP02/ 19MCUCP03	Object Oriented Programming with C++ (Practical)	3	3	40	60	100	2	
	Allied - II	18PHUA404	Physics - II Theory	5	3	20	55	75	4	6
		18PHUAP01	Physics - II Practical	2	3	20	30	50	2	
IV	Skill Based Subject - II	15MSUS402/ 15MCUS402	Multiskill Development Paper *©	3	1	40	60	100	3	
	Basic Tamil			2	-	100	-	100	2	
	Advanced Tamil				3	25	75			
	Non Major Elective - II	18MCUN402	Industrial Mathematics		3	-	100			
Total								725	25	
* Online Examination										

<b>SKILL BASED SUBJECTS</b>					
S.NO	Subject Code	Title of the Paper			
1	18MCUSP01	Documentation Package -LATEX(Practical)(Cafeteria System )			
2	15MCUS402	Multiskill Development Paper (Online exam - Ext : 60)			
<b>BASIC TAMIL/ADVANCED TAMIL/ NON-MAJOR ELECTIVES</b>					
1	14TMLU301	Basic Tamil *			
	14TMLU402				
2	14ADTU301	Advanced Tamil **			
	14ADTU402				
3	18MCUN301	Fundamentals of Mathematics			
	18MCUN402	Industrial Mathematics			
© Common for both B.Sc Mathematics and B.Sc Mathematics (CA)					
* For Students whose Part I in Secondary education is not Tamil					
** For Students whose Part I in Higher Secondary education is not Tamil					
<b>SELF LEARNING PAPERS (OPTIONAL)</b>					
S. NO	Subject Code	Title of the Paper	Exam.Dur.Hrs	Max.Marks	Credits
1	13AUGSL05	General Awareness (Online examination)	3	100	5
2	15MCUSL03	Vedic Mathematics -II	3	100	5
3	15MSUSL15/ 15MCUCL15	Scilab (Online exam)	1	100	5

MOOCs Non-ranking Compulsory Credit Course will be introduced in Part V for UG from the Academic Year 2019-20 and onwards