



# SACRED HEART COLLEGE, CHALAKUDY

Railway Station Road, Thrissur Dt., Kerala - 680 307, India

(Affiliated to University of Calicut & Re-accredited with A+ Grade by NAAC, CGPA 3.55)

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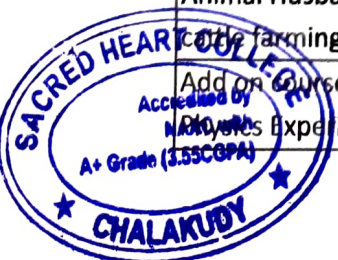
Date : 29/09/2022

## Sub- Clarification regarding the Add-on/Certificate courses of the year 2018-19 Metric - (1.2.2)

I certify that the twelve Add-on/Certificate courses offered during the academic year 2018-19 listed below are not part of the curricula offered by the University. The Course Codes and syllabi of these Add-on/Certificate courses are also not the same with the Course codes, titles and syllabi of Courses as part of the curriculum. We have attached the list of the Course Codes and syllabi of the normal curricula for clarification. The syllabi, attendance, certificates of the Add-on/Certificate courses are also provided in the other link so that NAAC can verify that the courses are not part of the normal curricula.

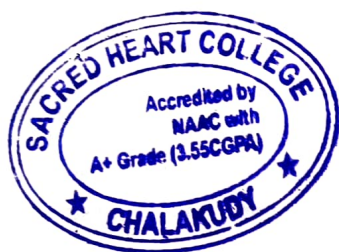
In the DVV, you have accepted only eight Add-on/Certificate courses indicating whether others are part of normal curricula. Thank you for giving us an opportunity to clarify this. I hope you will accept all the twelve Add-on/Certificate courses offered during the year 2018-19 and the corresponding number of students who pursued this course into consideration.

Name of Add on /Certificate programs offered	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Add on course on Quail Farming		2018-19	1	100 hrs	30	30
Certificate course on Ayurvedic Plant breeding		2018-19	1	30 hrs	30	30
Certificate course on Dairy Training		2018-19	1	50 hrs	30	30
Certificate course on Animal Husbandry and Cattle farming		2018-19	1	30 hrs	30	30
Add on Course Computer Interfaced Microbes Experiments		2018-19		30Hrs	21	21



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Add on course on Communication Skills	ADENG01	2018-19	1	140 hrs	40	26
Add on course on Toiletries	SHCHADD 2	2018-19	1	4 Months	37	37
Add on course on Soaps and Detergents	SHCHADD 1	2018-19	1	4 Months	32	32
Certificate course on Water analysis	SHCHADD 3	2018-19	1	4 Months	24	24
Add on course Industrial Mathematics		2018-19	1	30 hours	45	45
Add on course on Mathematics for competitive examination		2018-19	1	30 hours	90	90
Add on course Mathematics for social science		2018-19	1	30 hours	40	40



**PRINCIPAL**  
**SACRED HEART COLLEGE**  
**CHALAKUDY**



**UNIVERSITY OF CALICUT**

**Abstract**

BSc in Chemistry-CUCBCSS UG 2014-Scheme and Syllabus- approved-implemented-w.e.f 2014 Admissions- modifications in the syllabus- corrigendum issued

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**G & A - IV - J**

U.O.No. 2317/2015/Admn

Dated, Calicut University.P.O, 09.03.2015

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- Read:-*1. U.O. No. 3797/2013/CU, dated 07.09.2013 (CBCSS UG Modified Regulations) (File.ref.no. 13752/GA IV J SO/2013/CU).  
2. U.O. No. 5180/2014/Admn, dated 29.05.2014 (CBCSS UG Revised Regulations) (File.ref.no. 13752/GA IV J SO/2013/CU).  
3. Item no. 8 of the minutes of the meeting of the Board of Studies in Chemistry UG held on 03.04.2014.  
4. Item no. 21 of the minutes of the meeting of the Faculty of Science held on 27.06.2014.  
5. Orders of the VC on 14.07.2014, in the file no, 18602/GA IV /J1/2013/CU.  
6. U.O.No. 6824/2014/Admn Dated, Calicut University.P.O, 16.07.2014  
7. Item No.III a39 of the minutes of LXXII meeting of the Academic Council held on 15.01.2015  
8. Corrected syllabus forwarded by Chairman, Board of Studies in Chemistry UG.  
9. Orders in the file of even No.

**ORDER**

The Modified Regulations of Choice Based Credit Semester System for UG Curriculum w.e.f 2014 was implemented under the University of Calicut vide paper read as (1).

The Revised CUCBCSS UG Regulations has been implemented w.e.f 2014 admission, for all UG programme under CUCBCSS in the University, vide paper read as (2).

The Board of Studies in Chemistry UG finalized the revised syllabus of Chemistry UG for implementation w.e.f the Academic Year 2014-2015. vide paper read as (3).

The Faculty of Science has also approved the minutes of the Board vide paper read as (4).

The Hon'ble Vice Chancellor, considering the exigency, exercising the powers of the Academic Council has approved the items regarding syllabus implementation in the minutes of the concerned

Academic Council, vide paper read as (5).

The Scheme & Syllabus for B.Sc in Chemistry- CUCBCSS UG 2014, w.e.f 2014 admission has been implemented vide paper read as (6).

The LXXII meeting of the Academic Council held on 15.01.2015, vide paper read as (7), ratified the action of Vice Chancellor in implementing the Scheme and Syllabus vide paper read as 5

As per paper read as (8), the Chairman Board of Studies in Chemistry UG suggests the following corrections in the syllabus implemented vide paper read as 6:

Page No.21, Line No.8: a sentence to be added: "*Conventional titration method shall be employed only in those cases where double burette titration method is not possible*".

Page No. 112: Footnote of Table 3: The sentence to be replaced as: 90% and above = 4, 80 to below 90% = 3.5, 70 to below 80% = 3, 60 to below 70% = 2.5, 50 to below 60% = 2, 40 to below 50% = 1.5, 35 to below 40% = 1, below 35% = 0.

Sanction has, therefore, been accorded for implementing the corrections in the syllabus.

Therefore the Scheme and Syllabus implemented vide paper read as (6) stands corrected to this effect.

Corrigendum is issued accordingly.

(The corrected syllabus is attached herewith and is available in the website:

[www.universityofcalicut.info](http://www.universityofcalicut.info))

Usha K  
Deputy Registrar

To

1. All Affiliated Colleges/SDE/Dept.s/Institutions under University of Calicut.
2. The Controller of Examinations, University of Calicut.
3. The Director SDE, University of Calicut.

Forwarded / By Order

Section Officer



# **UNIVERSITY OF CALICUT**

## **B.Sc. DEGREE PROGRAMME IN CHEMISTRY**

**UNDER CHOICE BASED CREDIT AND SEMESTER SYSTEM**

### **SCHEME AND SYLLABI**

**2014 ADMISSION ONWARDS**

**CORE COURSES, COMPLEMENTARY COURSES & OPEN COURSES**

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**SYLLABUS**

FOR

**CORE COURSES**



**Core Course Structure**  
**Total Credits: 56 (Internal: 20%; External: 80%)**

<i>Semester</i>	<i>Code No</i>	<i>Course Title</i>	<i>Hrs/Week</i>	<i>Total Hrs</i>	<i>Credit</i>	<i>Marks</i>	
<b>I</b>	CHE1B01	Core Course I: Theoretical and Inorganic Chemistry-I	2	36	2	100	
	-	Core Course V : Inorganic Chemistry Practical-I	2	36	-*	-	
<b>II</b>	CHE2B02	Core Course II: Theoretical and Inorganic Chemistry-II	2	36	2	100	
	-	Core Course V : Inorganic Chemistry Practical-I	2	36	-*	-	
<b>III</b>	CHE3B03	Core Course III: Physical Chemistry-I	3	54	3	100	
	-	Core Course V : Inorganic Chemistry Practical-I	2	36	-*	-	
<b>IV</b>	CHE4B04	Core Course IV: Organic Chemistry-I	3	54	3	100	
	CHE4B05(P)	Core Course V : Inorganic Chemistry Practical-I	2	36	4	100	
<b>V</b>	CHE5B06	Core Course VI: Inorganic Chemistry-III	3	54	3	100	
	CHE5B07	Core Course VII: Organic Chemistry-II	4	72	3	100	
	CHE5B08	Core Course VIII: Physical Chemistry-II	4	72	3	100	
	-	Core Course XIV: Physical Chemistry Practical	5	90	-**	-	
	-	Core Course XV: Organic Chemistry Practical	5	90	-**	-	
	-	Core Course XVIII: Project Work	2	36	-**	-	
<b>VI</b>	CHE6B09	Core Course IX: Inorganic Chemistry-IV	3	54	3	100	
	CHE6B10	Core Course X: Organic Chemistry-III	3	54	3	100	
	CHE6B11	Core Course XI: Physical Chemistry-III	3	54	3	100	
	CHE6B12	Core Course XII: Advanced and Applied Chemistry	3	54	3	100	
	CHE6B13(E1)	Core Course XIII: Elective***	1. Industrial Chemistry	3	54	3	100
	CHE6B13(E2)		2. Polymer Chemistry				
	CHE6B13(E3)		3. Medicinal and Environmental Chemistry				
	CHE6B14(P)	Core Course XIV: Physical Chemistry Practical	-	-	4**	100	
	CHE6B15(P)	Core Course XV: Organic Chemistry Practical	-	-	4**	100	
	CHE6B16(P)	Core Course XVI: Inorganic Chemistry Practical-II #	5	90	4	100	
	CHE6B17(P)	Core Course XVII: Inorganic Chemistry Practical-III	5	90	4	100	
	CHE6B18(Pr)	Core Course XVIII: Project Work	-	-	2**	50	
	<b>Total</b>					<b>56</b>	<b>1750</b>

\* Exam will be held at the end of 4<sup>th</sup> semester

\*\* Exam will be held at the end of 6<sup>th</sup> semester

\*\*\* An institution can choose any one among the three courses.

#Includes industrial visit also. Marks: 85 (Inorganic Chemistry Practical-II) + 15 (Industrial visit).

**SYLLABUS**

FOR

**COMPLEMENTARY  
COURSES**

## CHEMISTRY COMPLEMENTARY COURSE STRUCTURE

**Total Credits: 12 (Internal: 20%; External: 80%)**

<i>Semester</i>	<i>Code No</i>	<i>Course Title</i>	<i>Hrs/ Week</i>	<i>Total Hrs</i>	<i>Credit</i>	<i>Marks</i>
<b>I</b>	CHE1C01	Complementary Course I: General Chemistry	2	36	2	80
	-	Complementary Course V: Chemistry Practical	2	36	-*	-
<b>II</b>	CHE2C02	Complementary Course II: Physical Chemistry	2	36	2	80
	-	Complementary Course V: Chemistry Practical	2	36	-*	-
<b>III</b>	CHE3C03	Complementary Course III: Organic Chemistry	3	54	2	80
	-	Complementary Course V: Chemistry Practical	2	36	-*	-
<b>IV</b>	CHE4C04	Complementary Course IV: Physical and Applied Chemistry	3	54	2	80
	CHE4C05(P)	Complementary Course V: Chemistry Practical	2	36	4*	80
<b>Total</b>					<b>12</b>	<b>400</b>

\* Examination will be held at the end of 4<sup>th</sup> semester

**SYLLABUS**

FOR

**OPEN COURSES**

**OPEN COURSE STRUCTURE**  
**(FOR STUDENTS OTHER THAN B.Sc. CHEMISTRY)**  
**Total Credits: 2 (Internal 20%; External 80%)**

<i>Semester</i>	<i>Code No</i>	<i>Course Title</i>	<i>Hrs/ Week</i>	<i>Total Hrs</i>	<i>Marks</i>
<b>V</b>	CHE5D01	Open Course 1: Environmental Chemistry	2	36	50
	CHE5D02	Open Course 2: Chemistry in Daily Life			
	CHE5D03	Open Course 3: Food Science and Medicinal Chemistry			



**UNIVERSITY OF CALICUT**

**Abstract**

General and Academic - Faculty of Science - Syllabus of BSc Chemistry Programme under CBCSS UG Regulations 2019 with effect from 2019 Admission onwards - Implemented - Orders Issued

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**G & A - IV - J**

U.O.No. 9082/2019/Admn

Dated, Calicut University.P.O, 09.07.2019

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- Read:-*1. U.O.No. 4368/2019/Admn dated 23.03.2019  
2. Item No. 1 of the minutes of the combined meeting of the Boards of Studies in Chemistry UG, Polymer Chemistry and Industrial Chemistry held on 27.05.2019  
3. Item No. I.16 of the minutes of the meeting of Faculty of Science held on 27.06.2019

**ORDER**

The Regulations for Choice Based Credit and Semester System for Under Graduate (UG) Curriculum 2019 (CBCSS UG Regulations 2019) for all UG Programmes under CBCSS-Regular and SDE/Private Registration w.e.f. 2019 admission has been implemented vide paper read first above.

The combined meeting of the Boards of Studies in Chemistry UG, Polymer Chemistry and Industrial Chemistry on 27.05.2019 has approved the Syllabus of BSc Chemistry Programme in tune with the new CBCSS UG Regulations with effect from 2019 Admission onwards, vide paper read second above.

The Faculty of Science at its meeting held on 27.06.2019 has approved the minutes of the combined meeting of the Boards of Studies in Chemistry UG, Polymer Chemistry and Industrial Chemistry on 27.05.2019 vide paper read third above.

Under these circumstances, considering the urgency, the Vice Chancellor has accorded sanction to implement the Scheme and Syllabus of BSc Chemistry Programme in accordance with the new CBCSS UG Regulations 2019, in the University with effect from 2019 Admission onwards, subject to ratification by the Academic Council.

The Scheme and Syllabus of BSc Chemistry Programme in accordance with CBCSS UG Regulations 2019, is therefore implemented in the University with effect from 2019 Admission onwards.

Orders are issued accordingly. (Syllabus appended)

Biju George K

Assistant Registrar

To

The Principals of all Affiliated Colleges

Copy to: PS to VC/PA to PVC/ PA to Registrar/PA to CE/JCE I/JCE IV/DoA/EX and EG Sections/GA I F/CHMK Library/Information Centres/SF/DF/FC

Forwarded / By Order

Section Officer



# **UNIVERSITY OF CALICUT**

**B.Sc. DEGREE PROGRAMME**

**IN**

**CHEMISTRY**

(CBCSSUG 2019)

**UNDER CHOICE BASED CREDIT AND SEMESTER SYSTEM**

**SCHEME AND SYLLABI**

**2019 ADMISSION ONWARDS**

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**SYLLABUS**

**FOR**

**CORE COURSE**

**Core Course Structure - Total Credits: 55 (Internal: 20%; External: 80%)**

<i>Semester</i>	<i>Code No</i>	<i>Course Title</i>	<i>Hrs/Week</i>	<i>Total Hrs</i>	<i>Credit</i>	<i>Marks</i>	
<b>I</b>	CHE1B01	Core Course I: Theoretical and Inorganic Chemistry- I	2	32	2	75	
	-	Core Course V : Inorganic Chemistry Practical-I	2	32	-*	-	
<b>II</b>	CHE2B02	Core Course II: Theoretical and Inorganic Chemistry- II	2	32	2	75	
	-	Core Course V : Inorganic Chemistry Practical-I	2	32	-*	-	
<b>III</b>	CHE3B03	Core Course III: Physical Chemistry-I	3	48	3	75	
	-	Core Course V : Inorganic Chemistry Practical-I	2	32	-*	-	
<b>IV</b>	CHE4B04	Core Course IV: Organic Chemistry-I	3	48	3	75	
	CHE4B05(P)	Core Course V : Inorganic Chemistry Practical-I	2	32	4	100	
<b>V</b>	CHE5B06	Core Course VI: Inorganic Chemistry-III	3	48	3	75	
	CHE5B07	Core Course VII: Organic Chemistry-II	4	64	3	75	
	CHE5B08	Core Course VIII: Physical Chemistry-II	3	48	3	75	
	-	Core Course XIV: Physical Chemistry Practical	5	80	-**	-	
	-	Core Course XV: Organic Chemistry Practical	5	80	-**	-	
	-	Core Course XVIII: Project Work	2	32	-**	-	
<b>VI</b>	CHE6B09	Core Course IX: Inorganic Chemistry-IV	3	48	3	75	
	CHE6B10	Core Course X: Organic Chemistry-III	3	48	3	75	
	CHE6B11	Core Course XI: Physical Chemistry-III	3	48	3	75	
	CHE6B12	Core Course XII: Advanced and Applied Chemistry	3	48	3	75	
	CHE6B13(E1)	Core Course XIII: Elective ***	1. Industrial Chemistry	3	48	2	75
	CHE6B13(E2)		2. Polymer Chemistry				
	CHE6B13(E3)		3. Medicinal and Environmental Chemistry				
	CHE6B14(P)	Core Course XIV: Physical Chemistry Practical	-	-	4**	100	
	CHE6B15(P)	Core Course XV: Organic Chemistry Practical	-	-	4**	100	
	CHE6B16(P)	Core Course XVI: Inorganic Chemistry Practical-II #	5	80	4	100	
	CHE6B17(P)	Core Course XVII: Inorganic Chemistry Practical-III	5	80	4	100	
	CHE6B18(Pr)	Core Course XVIII: Project Work	-	-	2**	75	
<b>Total</b>					<b>55</b>	<b>1475</b>	

\* Exam will be held at the end of 4<sup>th</sup> semester

\*\* Exam will be held at the end of 6<sup>th</sup> semester

\*\*\* An institution can choose any one among the three courses.

# Includes industrial visit also. Marks: 85 (Inorganic Chemistry Practical-II) + 15 (Industrial visit).

**SYLLABUS**

**FOR**

**COMPLEMENTARY**

**COURSES**

## CHEMISTRY COMPLEMENTARY COURSE STRUCTURE

**Total Credits: 12 (Internal: 20%; External: 80%)**

<i>Semester</i>	<i>Code No</i>	<i>Course Title</i>	<i>Hrs/Week</i>	<i>Total Hrs</i>	<i>Credit</i>	<i>Marks</i>
<b>I</b>	CHE1C01	Complementary Course I: General Chemistry	2	32	2	75
	-	Complementary Course V: Chemistry Practical	2	32	-*	-
<b>II</b>	CHE2C02	Complementary Course II: Physical Chemistry	2	32	2	75
	-	Complementary Course V: Chemistry Practical	2	32	-*	-
<b>III</b>	CHE3C03	Complementary Course III: Organic Chemistry	3	48	2	75
	-	Complementary Course V: Chemistry Practical	2	32	-*	-
<b>IV</b>	CHE4C04	Complementary Course IV: Physical and Applied Chemistry	3	48	2	75
	CHE4C05(P)	Complementary Course V: Chemistry Practical	2	32	4*	100
<b>Total</b>					<b>12</b>	<b>400</b>

\* Examination will be held at the end of semester IV.

**SYLLABUS**

**FOR**

**OPEN COURSES**

**OPEN COURSE STRUCTURE****(FOR STUDENTS OTHER THAN B.Sc. CHEMISTRY) Total Credits: 3 (Internal 20%; External 80%)**

<i>Semester</i>	<i>Code No</i>	<i>Course Title</i>	<i>Hrs/Week</i>	<i>Total Hrs</i>	<i>Marks</i>
V	CHE5D01	Open Course 1: Environmental Chemistry	3	48	75
	CHE5D02	Open Course 2: Chemistry in Daily Life			
	CHE5D03	Open Course 3: Food Science and Medicinal Chemistry			



**UNIVERSITY OF CALICUT**

**Abstract**

MSc programme in Chemistry under Credit Semester System (PG)- Scheme and Syllabus -approved -implemented-with effect from 2015 admission- Orders issued

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**G & A - IV - J**

U.O.No. 10385/2015/Admn

Dated, Calicut University.P.O, 03.10.2015

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- Read:-*1. U.O.No. GAIV/J1/1373/08 dated, 23.07.2010.  
2. GA IV/J2/4684/10 dated 30 .07.2010  
3. Item No.3 in the minutes of the meeting of the Board of Studies in Chemistry PG held on 26.05.2015  
4. Approval of Dean, Faculty of Science dated 12.09.2015.  
5. Orders of Vice Chancellor dated 22.09.2015

**ORDER**

As per University Order read as first, Credit Semester System was implemented to PG programmes in affiliated Arts and Science Colleges and Self Financing Centres of the University with effect from 2010 admission onwards.

Vide paper read as (2) the scheme and Syllabus of MSc programme in Chemistry with effect from 2010 admission has been implemented.

The Board of Studies in Chemistry PG, vide paper read as (3) approved the revised programme pattern, syllabus, distribution of credits and hours, scheme of evaluation, model question papers etc of MSc Chemistry programme w.e.f 2015 admission.

The Dean Faculty of Science has also approved the same vide paper read as (4).

Vide paper read as (5), The Vice-Chancellor has approved Item No.3 in the minutes of the meeting of the Board of Studies in Chemistry PG held on 26.05.2015 subject to ratification by the Academic Council.

Sanction has therefore been accorded for implementing the scheme and Syllabus of MSc programme in Chemistry with effect from 2015 admission.

Orders are issued accordingly.

Detailed Scheme and Syllabus is appended.

(Scheme and Syllabus is uploaded in Website)

Usha K  
Deputy Registrar

To

The Principals of affiliated Colleges offering MSc programme in Chemistry

Copy to:

PS to VC, PA to Registrar, Chairman, B/S Chemistry, Pareeksha Bhavan

Forwarded / By Order

Section Officer



**TABLE 1**  
**Courses offered for M.Sc. Chemistry Programme under CSS**  
**Patten in Affiliated Colleges (2015 onwards)**

Semester	Course Code	Course Title	Instruction/Week	Credits
I	CH1CO1	Basic concepts in quantum chemistry and group Theory	3	3
	CH1CO2	Elementary inorganic chemistry	3	3
	CH1CO3	Structure and reactivity of organic compounds	3	3
	CH1CO4	Thermodynamics, kinetics and catalysis	3	3
	CH1PO1	Inorganic chemistry practical I	4	-
	CH1PO2	Organic chemistry Practical I	4	-
	CH1PO3	Physical chemistry practical I	4	-
			<b>Total credits:</b>	<b>Core</b>
II	CH2CO5	Applications of quantum mechanics and group theory	3	3
	CH2CO6	Coordination chemistry	3	3
	CH2CO7	Organic reaction mechanisms	3	3
	CH2CO8	Electrochemistry, solid state chemistry and Statistical Thermodynamics	3	3
	CH2PO4	Inorganic chemistry practical II	4	4
	CH2PO5	Organic chemistry practical II	4	4
	CH2PO6	Physical chemistry practical II	4	4
	CH2VO1	Viva voce		2
		<b>Total credits:</b>	<b>Core</b> <b>Viva</b>	<b>24</b> <b>2</b>
III	CH3CO9	Molecular spectroscopy	3	3
	CH3C10	Organometallic & Bioinorganic chemistry	3	3
	CH3C11	Organic transformations and reagents	3	3
	CH3PO7	Inorganic chemistry practical III	4	
	CH3PO8	Organic chemistry practical III	4	
	CH3PO9	Physical chemistry practical III	4	
	CH3EO1	Synthetic organic chemistry(Elective)	3	3
	CH3EO2	Computational chemistry(Elective)	3	3
	CH3EO3	Green and Nanochemistry(Elective)	3	3
			<b>Total Credits:</b>	<b>Core</b> <b>Elective</b>

IV	CH4C12	Advanced Topics in Chemistry	4	4	
	CH4C13	Instrumental Methods of Analysis	4	4	
	CH4P10	Inorganic Chemistry Practical IV	3	4	
	CH4P11	Organic Chemistry Practical IV	3	4	
	CH4P12	Physical Chemistry Practical IV	3	4	
	CH4EO4	Petrochemicals and Cosmetics(Elective)	4	4	
	CH4EO5	Industrial Catalysis(Elective)	4	4	
	CH4EO6	Natural Products & Polymers(Elective)	4	4	
	CH4EO7	Material Science(Elective)	4	4	
	CH4PrO1	Research Project	3	4	
	CH4VO2	Viva Voce		2	
		<b>Total Credits:</b>			
				<b>Core</b>	<b>20</b>
			<b>Elective</b>	<b>4</b>	
			<b>Project</b>	<b>4</b>	
			<b>Viva</b>	<b>2</b>	
<b>TOTAL CREDITS OF THE PROGRAMME</b>					
			<b>CORE</b>	<b>65</b>	
			<b>ELECTIVE</b>	<b>7</b>	
			<b>PROJECT</b>	<b>4</b>	
			<b>VIVA VOCE</b>	<b>4</b>	
			<b>TOTAL CREDITS</b>	<b>80</b>	



UNIVERSITY OF CALICUT

**Abstract**

General and Academic - Faculty of Science - Syllabus of MSc Chemistry Programme for affiliated colleges under CBCSS PG Regulations 2019 with effect from 2019 Admission onwards - Implemented- Orders Issued

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**G & A - IV - J**

U.O.No. 8957/2019/Admn

Dated, Calicut University.P.O, 06.07.2019

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*Read:-*1. U.O.No. 4487/2019/Admn dated 26.03.2019

2. Item No. 2 in the minutes of the meeting of the Board of Studies in Chemistry (PG) held on 12.06.2019

3. Item No. I.13 in the minutes of the meeting of Faculty of Science held on 27.06.2019

**ORDER**

The Regulations for Choice Based Credit and Semester System for Post Graduate (PG) Curriculum-2019 (CBCSS PG Regulations 2019) for all PG Programmes under CBCSS for Affiliated Colleges and SDE/PrivateRegistration w.e.f. 2019 admission has been implemented vide paper read first above.

The meeting of Board of Studies in Chemistry (PG) held on 12/06/2019 has approved the Syllabus of MSc Chemistry Programme in tune with the new CBCSS PG Regulations with effect from 2019 Admission onwards, vide paper read second above.

The Faculty of Science at its meeting held on 27/06/2019 has approved the minutes of the meeting of the Board of Studies in Chemistry (PG) held on 12/06/2019, vide paper read third above.

Under these circumstances, considering the urgency, the Vice Chancellor has accorded sanction to implement the Scheme and Syllabus of MSc Chemistry Programme in accordance with new CBCSS PG Regulations 2019, for affiliated colleges in the University with effect from 2019 Admission onwards, subject to ratification by the Academic Council.

The Scheme and Syllabus of M Sc Chemistry Programme for affiliated colleges in accordance with CBCSS PG Regulations 2019, is therefore implemented in the University with effect from 2019 Admission onwards.

Orders are issued accordingly. (Syllabus appended)

Biju George K

Assistant Registrar

To

The Principals of all Affiliated Colleges

Copy to: PS to VC/PA to PVC/ PA to Registrar/PA to CE/JCE I/JCE V/DoA/EX and EG Sections/GA I F/CHMK Library/Information Centres/SF/DF/FC

Forwarded / By Order

Section Officer

**TABLE 1**  
**Courses offered for M.Sc. Chemistry Programme under**  
**CBCSS Patten in Affiliated Colleges (2019 onwards)**

Semester	Course Code	Course Title	Instruction/ Week	Credits
<b>I</b>	CHE1C01	Quantum Mechanics and Computational Chemistry	4	4
	CHE1C02	Elementary inorganic chemistry	3	4
	CHE1C03	Structure and reactivity of organic Compounds	3	4
	CHE1C04	Thermodynamics, kinetics, and catalysis	3	4
	CHE1L01	Inorganic chemistry practical I	4	-
	CHE1L02	Organic chemistry Practical I	4	-
	CHE1L03	Physical chemistry practical I	4	-
		<b>Total credits:</b>	<b>Core</b>	<b>16</b>
<b>II</b>	CHE2C05	Group theory and Chemical Bonding	3	3
	CHE2C06	Coordination chemistry	3	3
	CHE2C07	Reaction mechanism in Organic Chemistry	3	3
	CHE2C08	Electrochemistry, solid state chemistry, and Statistical Thermodynamics	3	3
	CHE2L04	Inorganic chemistry practical II	4	3
	CHE2L05	Organic chemistry practical II	4	3
	CHE2L06	Physical chemistry practical II	4	3
		<b>Total credits:</b>	<b>Core</b>	<b>21</b>
	CHE3C09	Molecular spectroscopy	4	4
	CHE3C10	Organometallic & Bioinorganic chemistry	3	4
	CHE3C11	Reagents and Transformations in Organic Chemistry	3	4

III	CHE3L07	Inorganic chemistry practical III	4		
	CHE3L08	Organic chemistry practical III	4		
	CHE3L09	Physical chemistry practical III	4		
	CHE3E01	Synthetic organic chemistry(Elective)	3	4	
	CHE3E02	Computational chemistry(Elective)	3	4	
	CHE3E03	Green and Nanochemistry(Elective)	3	4	
		<b>Total Credits:</b>		<b>Core Elective</b>	<b>12 4</b>
IV	CHE4C12	Instrumental Methods of Analysis	4	4	
	CHE4L10	Inorganic Chemistry Practical IV	3	3	
	CHE4L11	Organic Chemistry Practical IV	3	3	
	CHE4L12	Physical Chemistry Practical IV	3	3	
	CHE4E04	Petrochemicals and Cosmetics(Elective)	4	4	
	CHE4E05	Industrial Catalysis(Elective)	4	4	
	CHE4E06	Natural products & Polymer Chemistry (Elective)	4	4	
	CHE4E07	Material Science(Elective)	4	4	
	CHE4E08	Organometallic Chemistry	4	4	
	CHE4P01	Research Project	3	4	
	CHE4V01	Viva Voce		2	
		<b>Total Credits:</b>		<b>Core Elective Project Viva</b>	<b>13 8 4 2</b>
	<b>TOTAL CREDITS OF THE PROGRAMME :</b>				
	<b>CORE</b>				<b>62</b>
	<b>ELECTIVE</b>				<b>12</b>

	<b>PROJECT</b>	<b>4</b>
	<b>VIVA-VOCE</b>	<b>2</b>
	<b><i>TOTAL CREDITS</i></b>	<b>80</b>