

# MES KEVEEYAM COLLEGE VALANCHERY

Valanchery, Malappuram Dist, Kerala, Pin: 677 552.  
Ph: 0494-2642670  
E-mail: principal@meskvmcollege.org

Aided by Govt. of Kerala and Affiliated to University of Calicut  
Reaccredited with 'A' Grade by NAAC (Score 3.28)  
ISO 9001:2015 certified institution

## List of new courses introduced in the Programme B Voc Retail Management

Name of the New Courses Introduced in the Last 5 years	Programme Name	Programme Code	Course Code	Year of Introduction
Transactions Essential English Language Skills A01	BVoc Retail Management	MESKV/56/RT	GEC1EG01	2018
Malayalam –BashayumSahithyavum-I MAL1A01(2)	BVoc Retail Management	MESKV/56/RT	GEC1ML02	2018
Communication Skills in Arabic ARB1A07(1)	BVoc Retail Management	MESKV/56/RT	GEC1AR02	2018
Prose and One Act Plays A07	BVoc Retail Management	MESKV/56/RT	GEC1HD02	2018
Ways with Words A02	BVoc Retail Management	MESKV/56/RT	GEC2EG04	2018
Malayalam –BashayumSahithyavum-II MAL2A02(2)	BVoc Retail Management	MESKV/56/RT	GEC2ML05	2018
Literature in Arabic ARB2A08(2)	BVoc Retail Management	MESKV/56/RT	GEC2AR05	2018
Poetry and Short Stories A09	BVoc Retail Management	MESKV/56/RT	GEC2HD05	2018
Writing for Academics and professional Success A03	BVoc Retail Management	MESKV/56/RT	GEC3EG07	2018
Zeitgeist: Readings on Contemporary Culture A04	BVoc Retail Management	MESKV/56/RT	GEC4EG10	2018
E-Commerce and General Informatics	B Voc Retail Management	MESKV/56/RT	GECIEC03	2018
Introduction to Retail Store Operations- Health Safety, Security, Team & Organizational Dynamics	B Voc Retail Management	MESKV/56/RT	SDC1RM01	2018
Basic Business Communication Skills	B Voc Retail Management	MESKV/56/RT	SDC1RM02(P)	2018
Lab on Business Communication Skills(P)	B Voc Retail Management	MESKV/56/RT	SDC1RM03(P)	2018
Lab on Retail Selling Skills- I(P)	B Voc Retail Management	MESKV/56/RT	SDC1RM04(P)	2018
Financial Accounting BC2B02	B Voc Retail Management	MESKV/56/RT	GEC2FA06	2018
Retail Logistics Management	B Voc Retail Management	MESKV/56/RT	SDC2RM05	2018
Retail Shopper Behavior	B Voc Retail Management	MESKV/56/RT	SDC2RM06	2018
Lab on Retail Selling Skills II (P)	B Voc Retail Management	MESKV/56/RT	SDC2RM07(P)	2018
Internship/Project (Pr)	B Voc Retail Management	MESKV/56/RT	SDC2RM08(Pr)	2018
Personality and Soft Skills Development	B Voc Retail Management	MESKV/56/RT	GEC3PS08	2018
Human Resources Management BC3C03	B Voc Retail Management	MESKV/56/RT	GEC3HR09	2018
Retail Stores & Operations Management	B Voc Retail Management	MESKV/56/RT	SDC3RM09	2018
Store Display and Visual Merchandising	B Voc Retail Management	MESKV/56/RT	SDC3RM10	2018
Computerised Accounting (P)	B Voc Retail Management	MESKV/56/RT	SDC3RM11(P)	2018

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Name of the New Courses Introduced in the Last 5 years	Programme Name	Programme Code	Course Code	Year of Introduction
Lab on Store Display and Customer Service(P)	B Voc Retail Management	MESKV/56/RT	SDC3RM12(P)	2018
Entrepreneurship Development BC4A13	B Voc Retail Management	MESKV/56/RT	GEC4ED11	2018
Quantitative Techniques for Business BC4C04	B Voc Retail Management	MESKV/56/RT	GEC4QT12	2018
Elements of Salesmanship	B Voc Retail Management	MESKV/56/RT	SDC4RM13	2018
Retail Advertising & Sales Promotion	B Voc Retail Management	MESKV/56/RT	SDC4RM14	2018
Computer Practical I -I (MS Office) (P)	B Voc Retail Management	MESKV/56/RT	SDC4RM15(P)	2018
Internship/Project (Pr)	B Voc Retail Management	MESKV/56/RT	SDC4RM16(Pr)	2018
Conference and Event Management	B Voc Retail Management	MESKV/56/RT	GEC5EV13	2018
Mall Management	B Voc Retail Management	MESKV/56/RT	GEC5MM14	2018
Retail Planning	B Voc Retail Management	MESKV/56/RT	SDC5RM17	2018
Retail Targets & Locations	B Voc Retail Management	MESKV/56/RT	SDC5RM18	2018
Retail Distribution Management, Stores Layout & Design	B Voc Retail Management	MESKV/56/RT	SDC5RM19	2018
Computer Practical-II (MS Office) (P)	B Voc Retail Management	MESKV/56/RT	SDC5RM20(P)	2018
Lab on Advertisement and Sales Promotion(P)	B Voc Retail Management	MESKV/56/RT	SDC5RM21(P)	2018
Internship & Project (900 Hrs.)	B Voc Retail Management	MESKV/56/RT	SDC6RM22	2018

M.E.S. KEVEEYAM APPURAM  
VALANCHERY, KERALA, PIN: 676 552  
PRINCIPAL COLLEGE



# MES KEVEEYAM COLLEGE VALANCHERY

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## List of new courses introduced in the Programme B Voc Optometry

Name of the New Courses Introduced in the Last 5 years	Programme Name	Programme Code	Course Code	Year of Introduction
General Anatomy & Physiology	B Voc Optometry	MESKV/57/OP	GEC1GA03	2018
Physical Optics	B Voc Optometry	MESKV/57/OP	SDC1PO01	2018
Microbiology & Pharmacology	B Voc Optometry	MESKV/57/OP	SDC1MP02	2018
Microbiology & Pharmacology Practical	B Voc Optometry	MESKV/57/OP	SDC1MP04(P)	2018
General Anatomy & Physiology- Practical	B Voc Optometry	MESKV/57/OP	SDC1GA03 (P)	2018
Ocular Anatomy & Physiology- Physiology	B Voc Optometry	MESKV/57/OP	GEC20A06	2018
Geometrical Optics	B Voc Optometry	MESKV/57/OP	SDC2G005	2018
Biochemistry	B Voc Optometry	MESKV/57/OP	SDC2BC06	2018
Ocular Anatomy & Physiology-Practical Internship/Project	B Voc Optometry	MESKV/57/OP	SDC20A07	2018
Ocular Disease	B Voc Optometry	MESKV/57/OP	SDC2INT08 (P)	2018
Clinical Refraction	B Voc Optometry	MESKV/57/OP	GEC3R09	2018
Pathology & Immunology (General & Ocular)	B Voc Optometry	MESKV/57/OP	SDC3P109	2018
Ophthalmalic Instrumentation & Procedure	B Voc Optometry	MESKV/57/OP	SDC3P110	2018
Pathology & Immunology –Practical	B Voc Optometry	MESKV/57/OP	SDC3PI11(P)	2018
Ophthalmalic Instrumentation-Practical (EWM:1B01) Environmental Science	B Voc Optometry	MESKV/57/OP	SDC30112 (P)	2018
Community Optometry	B Voc Optometry	MESKV/57/OP	GEC4ES11	2018
Visual Optics	B Voc Optometry	MESKV/57/OP	GEC4CO12	2018
Dispensing Optics	B Voc Optometry	MESKV/57/OP	SDC4VO14	2018
Dispensing Optics-Practical Internship/ Project	B Voc Optometry	MESKV/57/OP	SDC4DO15	2018
Nutrition	B Voc Optometry	MESKV/57/OP	SDC4INT16(P)	2018
Geriatric & Pediatric Optometry	B Voc Optometry	MESKV/57/OP	GEC5NU13	2018
Contact Lens	B Voc Optometry	MESKV/57/OP	SDC5GP17	2018
Binocular Vision	B Voc Optometry	MESKV/57/OP	SDC5CL18	2018
Low Vision Aid & Visual Rehabilitation	B Voc Optometry	MESKV/57/OP	SDC5LV19	2018
			SDC5LV20 (P)	2018

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Name of the New Courses Introduced in the Last 5 years	Programme Name	Programme Code	Course Code	Year of Introduction
Contact Lens & Binocular Vision-Practical	B Voc Optometry	MESKV/57/OP	SDC5LBV21 (P)	2018
Low Vision & Geriatric Pediatric Optometry –Practical	B Voc Optometry	MESKV/57/OP	SDC5LGVG22 (P)	2018
Major Internship(900hrs)	B Voc Optometry	MESKV/57/OP	SDC6INT23 (P)	2018
A03 Writing for Academic & Professional Success	B Voc Optometry	MESKV/57/OP	SDC2INT08 (Pr)	2018
AO4 Zeitgeist : Readings on Society and Cultures	B Voc Optometry	MESKV/57/OP	GEC4EG10	2018
AO1 Transactions:Essential English Language Skills	B Voc Optometry	MESKV/57/OP	GEC1EG01	2018
MAL1A01(2) Malayalam Bhashayum Sahithyavum-I	B Voc Optometry	MESKV/57/OP	GEC1ML02	2018
ARB1A07(2)(LRP Pattern) –Essential Skills in Arabic	B Voc Optometry	MESKV/57/OP	GEC1AR02	2018
A07(3) Prose one act Play)	B Voc Optometry	MESKV/57/OP	GEC1HD02	2018
A02 Ways with Words	B Voc Optometry	MESKV/57/OP	GEC2EG04	2018
MAL2A02 (2) Malayalam- Bhashayum Sahithyavum-II	B Voc Optometry	MESKV/57/OP	GEC2ML05	2018
ARB2A08(2)– Reading Arabic Prose & Poetry	B Voc Optometry	MESKV/57/OP	GEC2AR05	2018
A09 Poetry and Short Stories	B Voc Optometry	MESKV/57/OP	GEC2HD05	2018



ज्ञान-विज्ञान विमुक्तये  
**UNIVERSITY GRANTS COMMISSION**  
**BAHADURSHAH ZAFAR MARG**  
**NEW DELHI – 110 002**

**Speed Post**

F.No. 5-1/2018 (NSQF)

July, 2018

**Sub: Approval of Programmes/ courses under NSQF**

Dear Sir/Madam,

This is with reference to your proposal for introducing vocational courses under NSQF. I am directed to convey approval of the UGC for the following programmes/courses to be run by your institution under NSQF from the academic session 2018-19:

Programme
B.Voc
1. Health Care (Optometry and Ophthalmological Tech)
2. Retail Management

It is further informed that the institution may admit 50 students per course, and appoint faculty and staff as per the provisions of the NSQF Guidelines.

You are requested to kindly ensure compliance of the terms and conditions/provisions as laid down in the Guidelines for providing Skill-based Education under National Skill Qualification Framework. You are also requested to convey your confirmation to start the course/s from the academic session 2018-19 along with the course-wise actual intake of students to UGC at the earliest.

With regards,

Yours faithfully,

(Mriganka Sekhar Sarma)  
Education Officer

Registrar/Principal/Nodal Officer  
MES Keveyam College,  
Valanchery, Malappuram,  
Distt- Kerala-676552.



UNIVERSITY OF CALICUT

Abstract

CDC Additional affiliation to new UGC aided B.Voc programmes for the academic year 2018-19 at various colleges in Thrissur, Malappuram & Wayanad districts under the University of Calicut - sanctioned - orders issued.

CDC-Ü

U O No. 957/2019/Admn

Dated, Calicut University.P.O, 22.01.2019

Read:-1. Various letters received from the University Grants Commission.

2. Applications for granting new B.Voc programmes, from the Principals of various colleges concerned.
3. Letter No. 81819/CDC--D-SO/2014/Admn dated 04.10.2018, 15.10.2018 & 24.10.2018.
4. Letter No. GS3-3559/2018 dated 31.10.2018 from the Principal Secretary to the Governor.
5. Reports received from District Level Inspection Committees concerned.
6. Letter No. 81819/CDC--D-SO/2014/Admn dated 09.11.2018.
7. G.O.(Ms)No.318/2018/HEDN dated 31/12/2018.
8. Applications for provisional affiliation to new B.Voc programmes, from the Principals of the colleges concerned.

ORDER

The University Grants Commission vide paper read as first has informed the granting of approval for the proposal submitted by various colleges, for introducing new B.Voc programmes under National Skill Qualification Framework (NSQF) from the academic year 2018-19, in compliance with the terms and conditions laid down in the guidelines for providing Skill-based Education under National Skill Qualification Framework (NSQF).

Based on the approval from the UGC, the Principals of concerned colleges, vide the paper read as second, have submitted applications in the statutory form and requested to issue necessary orders for granting provisional affiliation to these programmes from the 2018-19 academic year. The Principals of Farook College, Kozhikode and WMO Arts & Science College, Muttom, Wayanad have informed their unwillingness to start the programme during the academic year 2018-19.

1. The belated submission of applications require the issuance of a notification, by the Hon'ble Chancellor, under the provisions in Chapter XVIII of the CU Act 1975, sub section (2) granting extension of time upto the date proposed by the University for consideration of the application for starting the programme. As per papers read as third above, the Secretary to the Chancellor was requested to consider the belated applications and to issue a notification granting extension of time for consideration of the applications for affiliation of the new programmes for the academic year 2018-19.

2. Vide reference fourth, the Hon'ble Chancellor is pleased to issue a notification, extending the period up to 15.11.2018, within which the Syndicate shall consider the application for granting additional affiliation to the new programmes at these colleges for the academic year 2018-19.

3. The DLIC for the districts Thrissur, Malappuram & Wayanad have conducted inspection at these

1	Vimala College, Thrissur (Autonomous)	Web Technology	50	
		Food Processing	50	
2	St. Joseph's College, Irinjalakuda, (Autonomous)	Applied Microbiology and Forensic Science	50	
		Malayalam and Manuscript Management	50	
7	MES Asmabi College, P.Vemballor	Logistics Management	50	
		Digital Film Production	50	
		Fish Processing Technology	50	
		Tourism and Hospitality	50	
8	Sullamusallam Science College, Areacode	Accounting and Taxation	50	Malappuram
9	Dr. Ghafoor Memorial MES Mampad College, Mampad	Food Technology	50	
10	MES KVM College, Valanchery	Health Care (Optometry & Ophthalmological Technology)	50	
11		Retail Management	50	
11	Pazhassi Raja College, Pulpally, Wayanad	Agriculture	50	Wayanad
		Food Science	50	

(i) Permission is granted to Sullamusallam Science College, Areacode for starting the classes from the academic year 2019-20, as requested by the Principal.

(ii) The duration of the Semesters of the B.Voc courses started during the academic year 2018-19 itself, will be scheduled separately to ensure mandatory working days in all semesters and admission process to these programmes shall be completed by conventional methods. Once the admissions are completed, the colleges shall register the students with CAP and the Principal shall contact DoA for further procedures in this regard.

(iii) Admission process shall be completed as per the admission schedule detailed below.

SI No.	Particulars	Date
1	Date of formal orders of Provisional Affiliation	22.01.2019
2	Date of issuance of notification for admission and press release in this regard	23.01.2019
3	Last date for receipt / issue of applications	30.01.2019
4	Date of publication of rank list(Sure list & supplementary list) & Intimation of students via phone, SMS and e-mail	01.02.2019
5	Date of admission	02.02.2019
6	Date of commencement of class	04.02.2019
7	Date of closure of admission	08.02.2019

11. The provisional affiliation granted shall be subject to the following general conditions :-

(a) Selection and admission shall be made only on the basis of the rules and regulations of the University/Government and on the basis of the directions issued by the University/Government from time to time, failing which the affiliation granted will automatically be cancelled.

(b) In the light of the direction of the Supreme Court of India in W P (C) 656/1998, the institution shall

## SEMESTER I

C.No.	Paper Code	Paper Title	GEN/ SKILL	Marks			Hours per Week			
				Credit	Internal	External	Total	Theory	Practical	Total
1.1	GECIEG01	Transactions Essential English Language Skills A01	GEN	4	20	80	100	4	4	4
	GECIML02	Malayalam –BashayumSahithyavum-I MAL1A01(2).								
1.2	GECIAR02	Communication Skills in Arabic ARB1A07(I)	GEN	4	20	80	100	4	4	4
	GEC1HD02	Prose and One Act Plays A07								
1.3	GEC1EC03	E-Commerce and General Informatics	GEN	4	20	80	100	4	4	4
	SDC1IRM01	Introduction to Retail Store Operations- Health Safety, Security, Team & Organizational Dynamics								
1.5	SDC1IRM02	Basic Business Communication Skills	SKILL	5	20	80	100	5	5	5
	SDC1IRM03(P)	Lab on Business Communication Skills(P)								
1.7	SDC1IRM04(P)	Lab on Retail Selling Skills- I(P)	SKILL	5	20	80	100	5	5	5
	<b>Total</b>									
				30	140	560	700	21	9	30

## SEMESTER II

C. No.	Paper Code	Paper Title	GEN/ SKILL	Credit	Marks			Hours per Week		
					Internal	External	Total	Theory	Practical	Total
2.1	GEC2EG04	Ways with Words A02	GEN	4	20	80	100	4		4
2.2	GEC2ML05	Malayalam –BashayumSahithyavum-II MAL2A02(2)	GEN							
	GEC2AR05	Literature in Arabic ARB2A08(2)	GEN	4	20	80	100	4		4
2.3	GEC2HD05	Poetry and Short Stories A09								
2.4	GEC2FA06	Financial AccountingBC2B02	GEN	4	20	80	100	4		4
2.5	SDC2RM05	Retail Logistics Management	SKILL	4	20	80	100	4		4
2.6	SDC2RM06	Retail Shopper Behavior	SKILL	5	20	80	100	4		4
2.7	SDC2RM07(P)	Lab on Retail Selling Skills II (P)	SKILL	4	20	80	100	4		4
	SDC2RM08(Pr)	Internship/Project (Pr)	SKILL	5		100	100	5		5
		Total		30	140	560	700	20	10	30

Qualifications Pack – RAS/Q0102              Retail Cashier

### SEMESTER III

C. No.	Paper Code	Paper Title	GEN/ SKILL	Credit	Marks			Hours per Week		
					Internal	External	Total	Theory	Practical	Total
3.1	GEC3EG07	Writing for Academics and professional Success A03	GEN	4	20	80	100	4		4
3.2	GEC3PS08	Personality and Soft Skills Development -	GEN	4	20	80	100	4		4
3.3	GEC3HR09	Human Resources Management BC3C03	GEN	4	20	80	100	4		4
3.4	SDC3RM09	Retail Stores & Operations Management	SKILL	4	20	80	100	4		4
3.5	SDC3RM10	Store Display and Visual Merchandising -	SKILL	5	20	80	100	4		4
3.6	SDC3RM11(P)	Computerised Accounting (P)	SKILL	5	20	80	100	4	1	5
3.7	SDC3RM12(P)	Lab on Store Display and Customer Service(P)	SKILL	4	20	80	100			5
<b>Total</b>				30	140	560	700	20	10	30

Qualifications Pack – RAS/Q0103 Retail Trainee Associate

## SEMESTER IV

C.No.	Paper Code	Paper Title	GEN/ SKILL	Credit	Marks			Hours per Week		
					Internal	External	Total	Theory	Practical	Total
4.1	GEC4EG10	Zeitgeist: Readings on Contemporary Culture A04	GEN	4	20	80	100	4		4
4.2	GEC4ED11	Entrepreneurship Development BC4A13	GEN	4	20	80	100	4		4
4.3	GEC4QT12	Quantitative Techniques for Business BC4C04	GEN	4	20	80	100	4		4
4.4	SDC4RM13	Elements of Salesmanship	SKILL	4	20	80	100	4		4
4.5	SDC4RM14	Retail Advertising & Sales Promotion	SKILL	4	20	80	100	4		4
4.6	SDC4RM15(P)	Computer Practical -I (MS Office) (P)	SKILL	5	20	80	100	4		4
4.7	SDC4RM16(Pr)	Internship/Project (Pr)	SKILL	5			100	100	5	5
		<b>Total</b>		<b>30</b>	<b>140</b>	<b>560</b>	<b>700</b>	<b>20</b>	<b>10</b>	<b>30</b>

**Qualifications Pack – RAS/Q0104Retail Sales Associate**

## SEMESTER V

C. No.	Paper Code	Paper Title	GEN/ SKILL			Credit	Internal 1	External	Total	Marks			Hours per Week
			GEN	20	80					100	Theory	Practical	
5.1	GEC5EV13	Conference and Event Management	GEN	4	20	80	100	4	4				
5.2	GEC5MM14	Mall Management	GEN	4	20	80	100	4	4				
5.3	SDC5RM17	Retail Planning	SKILL	4	20	80	100	4	4				
5.4	SDC5RM18	Retail Targets & Locations	SKILL	4	20	80	100	4	4				
5.5	SDC5RM19	Retail Distribution Management, Stores Layout And Design	SKILL	4	20	80	100	4	4				
5.6	SDC5RM20(P)	Computer Practical-II (MS Office) (P)	SKILL	5	20	80	100	5	5				
5.7	SDC5RM21(P)	Lab on Advertisement and Sales Promotion(P)	SKILL	5	20	80	100	5	5				
<b>Total</b>				30	140	560	700	20	10	10			
<b>Qualifications Pack – RAS/Q0202 Business Builder/Retailer</b>													

## SEMESTER VI

C. No.	Paper Code	Paper Title	GEN/ SKILL			Credit	Internal 1	External	Total	Marks			Hours per Week
			GEN	20	700					Theory	Practical	Total	
6.1	SDC6RM22	Internship & Project (900 Hrs.)	GEN	30	700	700	700		700	900	900	4	
		<b>Total</b>		30						900	900	30	

**Qualifications Pack – RAS/Q0107 Retail Store Manager**

# DETAILED CURRICULUM

<b>SEMESTER I</b>								
<b>C.No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Credit</b>	<b>Marks</b>			<b>Hrs/wk</b>	
				<b>Int</b>	<b>Ext</b>	<b>Tot</b>	<b>T</b>	<b>P</b>
1.1	GEC1EG01	AO1 Transactions Essential English Language Skills	4	20	80	100	4	4
1.2	GEC1ML02 GEC1AR02	MAL1A01(2) Malayalam Bhashayum Sahithyavum-I  ARB1A07(2)(LRP Pattern) -Essential Skills in Arabic	4	20	80	100	4	4
1.3	GEC1HD02 GEC1GA03	A07(3) Prose and one act plays General Anatomy & Physiology	4	20	80	100	4	4
1.4	SDC1PO01	Physical Optics	4	20	80	100	4	4
1.5	SDC1MP02	Microbiology & Pharmacology	4	20	80	100	4	4
1.6	SDC1GA03 (P)	General Anatomy & Physiology- Practical	5	20	80	100	5	5
1.7	SDC1MP04 (P)	Microbiology & Pharmacology - Practical	5	20	80	100	5	5
<b>Semester I Total</b>			<b>30</b>				<b>700</b>	<b>20</b>
<b>SEMESTER II</b>								
<b>C.No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Credit</b>	<b>Marks</b>			<b>Hrs/wk</b>	
				<b>Int</b>	<b>Ext</b>	<b>Tot</b>	<b>T</b>	<b>P</b>
2.1	GEC2EG04	A02 Ways with Words	4	20	80	100	4	4
2.2	GEC2ML05 GEC2AR05 GEC2HD05	MAL2A02 (2) Malayalam- Bhashayum Sahithyavum-II  ARB2A082(2)- Reading Arabic Prose & Poetry  A09 Poetry and Short Stories	4	20	80	100	4	4
2.3	GEC2OA06	Ocular Anatomy & Physiology	4	20	80	100	4	4
2.4	SDC2GO05	Geometrical Optics	4	20	80	100	4	4
2.5	SDC2BC06	Biochemistry	5	20	80	100	5	5
2.6	SDC2OA07 (P)	Ocular Anatomy & Physiology- Practical	5	20	80	100	5	5
2.7	SDC2INT08 (Pr)	Internship/Project	4	0	100	100	4	4
<b>Semester II Total</b>			<b>30</b>				<b>700</b>	<b>21</b>

Qualification Pack-HSS/Q8601 -Basic Health Volunteer (Equivalent to ASHA)

SEMESTER III										
C.No	Course Code	Course Name	Credit	Marks			Hrs/wk			Total 1
				Int	Ext	Tot	T	P		
3.1	GEC3EG07	A03 Writing for academic & professional success	4	20	80	100	4			4
3.2	GEC3OD08	Ocular Disease	4	20	80	100	4			4
3.3	GEC3CR09	Clinical Refraction	4	20	80	100	4			4
3.4	SDC3PI09	Pathology & Immunology (General & Ocular)	4	20	80	100	4			4
3.5	SDC3OI10	Ophthalmic Instrumentation & Procedure	4	20	80	100	4			4
3.6	SDC3PI11 (P)	Pathology & Immunology –Practical	4	20	80	100			4	4
3.7	SDC3OI12 (P)	Ophthalmic Instrumentation-Practical	6	20	80	100			6	6
Semester III Total				30			700	20	10	30

SEMESTER IV										
C.No	Course Code	Course Name	Credit	Marks			Hrs/wk			Total 1
				Int	Ext	Tot	T	P		
4.1	GEC4EG10	AO4 Zeitgeist : Readings on society and cultures	4	20	80	100	4			4
4.2	GEC4ES11	(EWM1B01) Environmental Science	4	20	80	100	4			4
4.3	GEC4CO12	Community Optometry	4	20	80	100	4			4
4.4	SDC4VO13	Visual Optics	4	20	80	100	4			4
4.5	SDC4DO14	Dispensing Optics	5	20	80	100	5			5
4.6	SDC4DO15(P)	Dispensing Optics-Practical	5	20	80	100			5	5
4.7	SDC4INT16(Pr)	Internship/ Project	4	0	100	100			4	4
Semester IV Total				30			700	21	9	30

Qualification Pack-HSS/Q3001- Vision Technician.

SEMESTER V										
C.No	Course Code	Course Name	Credit	Marks			Hrs/wk			
				Int	Ext	Tot	T	P	Total	
5.1	GEC5NU13	Nutrition	4	20	80	100	4			4
5.2	SDC5GP17	Geriatric & Pediatric Optometry	4	20	80	100	4			4
5.3	SDC5CL18	Contact Lens	4	20	80	100	4			4
5.4	SDC5BV19	Binocular Vision	4	20	80	100	4			4
5.5	SDC5LV20	Low Vision Aid & Visual Rehabilitation	4	20	80	100	4			4
5.6	SDC5CLBV21 (P)	Contact Lens & Binocular Vision-Practical	6	20	80	100			6	6
5.7	SDC5LVGP22 (P)	Low Vision & Geriatric Pediatric Optometry -Practical	4	20	80	100			4	4
<b>Semester III Total</b>				<b>30</b>			<b>700</b>	<b>20</b>	<b>10</b>	<b>30</b>
SEMESTER VI										
C.No	Course Code	Course Name	Credit	Marks			Hrs/wk			
				Int	Ext	Tot	T	P	Total	
6.1	SDC6INT23 (Pr)	Major Internship (900 hrs.)	30	0	100	100			900	900
<b>Semester VI Total</b>				<b>30</b>			<b>100</b>			<b>900</b>
<b>Grant Total</b>				<b>180</b>			<b>3600</b>			

Qualification Pack-HSS/Q0401- Optometrist

# **UNIVERSITY OF CALICUT**



**B. Voc. Degree Programme in**

## **OPTOMETRY AND OPHTHALMOLOGICAL TECHNIQUES**

**SCHEME AND SYLLABUS**

**For General and Skill Papers**

**2018 ADMISSION ONWARDS**

**BOARD OF STUDIES IN PHYSICS  
CALICUT UNIVERSITY  
THENHIPALAM, KERALA, 673 635, INDIA**

## PREAMBLE

The University Grants Commission (UGC) has launched a scheme on skills development based higher education as part of college/university education, leading to Bachelor of Vocation (B.Voc.) Degree with multiple exits such as Diploma/Advanced Diploma under the NSQF. The B.Voc. programme is focused on universities and colleges providing undergraduate studies which would also incorporate specific job roles and their NOSs alongwith broad based general education. This would enable the graduates completing B.Voc. to make a meaningful participation in accelerating India's economy by gaining appropriate employment, becoming entrepreneurs and creating appropriate knowledge.

The B. Voc. Programme is designed to bridge the potential skill gap identified. The curriculum in each of the years of the programme would be a suitable mix of general education and skill development components. The general education component provides emphasis to Communication skill, Presentation skill, Health and Safety, Industrial Psychology, Environmental awareness, Entrepreneurship development and other relevant subjects in the field. General Education Components should not exceed 40% of the curriculum. Skill Development Component should match the skill gap identified at least 50% of Skill Development Component should be allotted to practical and can grow up to 60% based on the nature of the course. The practical component can be carried out in the college and/or the industry partner premises.

B.Voc. Optometry and Ophthalmological Techniques, is a graduate programme which includes various branches of Applied Physics and Biology. In the present epoch, this course has immense relevance, in the field of education and occupation. The course has been designed to mould the best optometrists. Eyes are the greatest gift of god to human beings. For what the beautiful world would be if one could not see that. Every third blind person is an Indian and there are many others suffering from defective eye problems. Cataract, Diabetic retinopathy and macular degeneration have become common diseases among aged people. Youth also suffer several vision problems. There are many specialty hospitals in Kerala which offer treatment of ophthalmic diseases. Job opportunities for trained optometrists are in plenty in the state.

An effective science education can be imparted at the undergraduate level only by revamping the curriculum according to the needs and developments of the modern society from time to time. To achieve this goal, the curriculum should be restructured by giving emphasis on various aspects such as the creativity of students, knowledge of current developments in the discipline, awareness of environmental impacts due to the development of science and technology, and the skills essential for handling equipments and instruments in laboratories and industries. The units of the syllabus are well defined. The number of contact hours required for each unit is also given. A list of reference books is provided at the end of each course.

## **AIMS**

This curriculum has been prepared with the objective of giving sound knowledge and understanding optometry and ophthalmological techniques to undergraduate students. The goal of the syllabus is to equip students with the potential to contribute to academic and industrial environments. This curriculum will expose students to various fields of optometry and develop interest in related disciplines.

## **BROAD OBJECTIVE**

The B. Voc courses are designed with the following objectives,

- To provide judicious mix of skills relating to a profession and appropriate content of General Education.
- To ensure that the students have adequate knowledge and skills.
- To understand basic facts and concepts in optometry and ophthalmological techniques
- To develop skills in the proper handling of optometric instruments.
- To be exposed to the different processes used in industries and their applications.
- To provide flexibility to the students by means of pre-defined entry and multiple exit points.
- To integrate NSQF within the undergraduate level of higher education in order to enhance employability of the graduates and meet industry requirements. Such graduates apart from meeting the needs of local and national industry are also expected to be equipped to become part of the global workforce.

## **SEMESTER**

A term consisting of 90 working days including examination days distributed over a minimum of 18 weeks of 5 working days consisting of six hours. Total credits in a semester: 30 (equivalent to 450 hours). For final semester internship, the total duration is 900 hours.

## **ELIGIBILITY AND INDEX CALCULATION**

The admission to B Voc programme will be as per the rules and regulations laid out by the University of Calicut for UG admissions. Candidates who have passed pre degree or plus two course(HSE/VHSE/Similar) in any stream with not less than 45% marks in aggregate shall be eligible to apply for admission to the B.Voc Optometry and ophthalmological techniques programme. (No age limit).

### **Index mark calculation:**

Plus two marks (HSE, out of 1200. Other streams should be converted to this appropriately). Additional marks are as follows:

1. 50% of the marks scored (in percentage) for Physics at +2 level
2. 50% of the marks scored (in percentage) for Biology at +2 level
3. 25% of the marks scored (in percentage) for Chemistry/Maths/Computer Science at +2 level
4. +2/ VHSE/ CBSE/ Diploma/ Certificate Course - studied ophthalmology related subjects – 10 marks.
5. NSS-10
6. NCC- as per the A,B,C certificate (5,10,15)

### **RESERVATION/QUOTA**

A maximum of 50 students can be admitted to one B. Voc programme. The students can be admitted only to the first semester (except for diploma holders). No students are admitted directly to the Third and Fifth semester in any circumstance except for diploma holders. Diploma holders may be permitted to third semester directly as mentioned above.

The reservation rules for Government/Aided Colleges are as same as that of the regular UG programmes conducted in colleges affiliated to this university.

### **LEVELS OF AWARDS**

B. Voc is a programme with multiple exits. Following table shows the various certificates and their duration.

<b>Awards</b>	<b>Duration</b>
Diploma	2semester
Advanced diploma	4 Semester
B Voc Degree	6 Semester

### **ASSESSMENT OF STUDENTS**

Assessment of students for each subject will be done by internal continuous assessment and Semester-End examinations. This dual mode assessment will be applicable to both Theory and Practical courses except for internship and project. Total marks in theory course reflect 80 marks external and 20 marks internal assessments. The mark division for practical courses is 20 marks internal and 80 marks external. For internship and project, there is no internal assessment

<b>Sl No</b>	<b>Courses</b>	<b>Internal</b>	<b>External</b>
1	Theory	20	80
2.	Practical	20	80
3.	Internship/ Project	0	100

### **INTERNAL EVALUATION**

20% of the total marks in each course are for internal evaluation. The colleges shall send only the marks obtained for internal examination to the university

The mark distribution to award internal continuous assessment marks for **theory** subject should be as follows:

<b>Assessment</b>	<b>Mark</b>
Test papers (minimum two, best two out of three is preferred)	10
Assignments (minimum two) such as home work, problem solving, group discussions, quiz, literature survey, seminar, term-project, software exercises, etc.	5
Regularity in the class	5

The mark distribution to award internal continuous assessment marks for **practical** subject should be as follows:

<b>Assessment</b>	<b>Mark</b>
Evaluation in the lab and Rough Record	10
End-semester Test	4
Viva	1
Regularity	5

#### **Note:**

No candidate will be permitted to attend the end-semester practical examination unless he/she produces certified record of the laboratory. Full credit for regularity in the class can be given only if the candidate has secured minimum 90% attendance in the subject. Attendance evaluation for each course is as follows

<b>% of attendance</b>	<b>Marks</b>
Above 90%	5
85-89%	4
80-84%	3
76-79%	2
75%	1

## **PATTERN OF QUESTIONS FOR SEMESTER-END EXAMINATIONS**

The question papers of Semester-End examinations of theory subjects shall be able to perform achievement testing of the students in an effective manner. Duration of Semester- End examinations will be 3 hours. The pattern of questions for theory subjects shall be as follows:

### **For Theory**

<b>Section</b>	<b>Total No.of questions</b>	<b>No.of question to be answered</b>	<b>Marks for each question</b>	<b>Total marks</b>
A:Very short/Objective Type	10	10	1	10
B:Shortanswer type	12	8	2	16
C: Short essay type	9	6	4	24
D: Essay type	4	2	15	30
<b>TOTAL</b>				<b>80</b>

### **For Practical:**

<b>Marks Distribution</b>	<b>Total marks</b>
Theory/ Algorithm/Flow diagram	20
Implementation	30
Result/Output	10
Record	10
Viva	10
Total	80

### **Mark distribution for internship:**

<b>Distribution</b>	<b>Marks</b>
Content and relevance or Dissertation	60
Viva	20
Presentation	20

## **GRADING- INDIRECT GRADING SYSTEM**

Indirect Grading System based on a 7 point scale is used to evaluate the performance of students.

<b>Marks scored</b>	<b>Grade</b>	<b>Remarks</b>
90 and Above	A+	Outstanding
80 to 89	A	Excellent
70 to 79	B	Very Good
60 to 69	C	Good
50 to 59	D	Satisfactory
40 to 49	E	Adequate
Below 40	F	Failure

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## COURSE STRUCTURE

### CREDIT DISTRIBUTION

Semester	Common Course		General Component	Skill Component	Total
	English	Additional Language			
I	4	4	4	$4+4+5+5=18$	30
II	4	4	4	$4+5+5+4=18$	30
III	4	-	$4+4=8$	$4+4+4+6=18$	30
IV	4	-	$4+4=8$	$4+5+5+4=18$	30
V	-	-	4	$4+4+4+4+6+4=26$	30
VI	-	-	-	30	30
<b>Total</b>	<b>16</b>	<b>8</b>	<b>28</b>	<b>128</b>	<b>180</b>

# DETAILED CURRICULUM

## SEMESTER I

C.No	Course Code	Course Name	Credit	Marks			Hrs/wk			
				Int	Ext	Tot	T	P	Total	
1.1	GEC1EG01	A01 Transactions Essential English Language Skills	4	20	80	100	4		4	
1.2	GEC1ML02	MAL1A01(2) Malayalam Bhashayum Sahithyavum-I	4	20	80	100	4		4	
	GEC1AR02	ARB1A07(2)(LRP Pattern) –Essential Skills in Arabic								
	GEC1HD02	A07(3) Prose and one act plays								
1.3	GEC1GA03	General Anatomy & Physiology	4	20	80	100	4		4	
1.4	SDC1PO01	Physical Optics	4	20	80	100	4		4	
1.5	SDC1MP02	Microbiology & Pharmacology	4	20	80	100	4		4	
1.6	SDC1GA03 (P)	General Anatomy & Physiology- Practical	5	20	80	100		5	5	
1.7	SDC1MP04 (P)	Microbiology & Pharmacology - Practical	5	20	80	100		5	5	
<b>Semester I Total</b>			<b>30</b>				<b>700</b>	<b>20</b>	<b>10</b>	<b>30</b>

## SEMESTER II

C.No	Course Code	Course Name	Credit	Marks			Hrs/wk			
				Int	Ext	Tot	T	P	Total	
2.1	GEC2EG04	A02 Ways with Words	4	20	80	100	4		4	
2.2	GEC2ML05	MAL2A02 (2) Malayalam- Bhashayum Sahithyavum-II	4	20	80	100	4		4	
	GEC2AR05	ARB2A082(2)– Reading Arabic Prose & Poetry								
	GEC2HD05	A09 Poetry and Short Stories								
2.3	GEC2OA06	Ocular Anatomy & Physiology	4	20	80	100	4		4	
2.4	SDC2GO05	Geometrical Optics	4	20	80	100	4		4	
2.5	SDC2BC06	Biochemistry	5	20	80	100	5		5	
2.6	SDC2OA07 (P)	Ocular Anatomy & Physiology- Practical	5	20	80	100		5	5	
2.7	SDC2INT08 (Pr)	Internship/Project	4	0	100	100		4	4	
<b>Semester II Total</b>			<b>30</b>				<b>700</b>	<b>21</b>	<b>9</b>	<b>30</b>

Qualification Pack-HSS/Q8601 -Basic Health Volunteer (Equivalent to ASHA)

SEMESTER III										
C.No	Course Code	Course Name	Credit	Marks			Hrs/wk			
				Int	Ext	Tot	T	P	Total	
3.1	GEC3EG07	A03 Writing for academic & professional success	4	20	80	100	4			4
3.2	GEC3OD08	Ocular Disease	4	20	80	100	4			4
3.3	GEC3CR09	Clinical Refraction	4	20	80	100	4			4
3.4	SDC3PI09	Pathology & Immunology (General & Ocular)	4	20	80	100	4			4
3.5	SDC3OI10	Ophthalmic Instrumentation & Procedure	4	20	80	100	4			4
3.6	SDC3PI11 (P)	Pathology & Immunology –Practical	4	20	80	100		4		4
3.7	SDC3OI12 (P)	Ophthalmic Instrumentation-Practical	6	20	80	100		6		6
Semester III Total				30			700	20	10	30
SEMESTER IV										
C.No	Course Code	Course Name	Credit	Marks			Hrs/wk			
				Int	Ext	Tot	T	P	Total	
4.1	GEC4EG10	AO4 Zeitgeist : Readings on society and cultures	4	20	80	100	4			4
4.2	GEC4ES11	(EWM1B01) Environmental Science	4	20	80	100	4			4
4.3	GEC4CO12	Community Optometry	4	20	80	100	4			4
4.4	SDC4VO13	Visual Optics	4	20	80	100	4			4
4.5	SDC4DO14	Dispensing Optics	5	20	80	100	5			5
4.6	SDC4DO15(P)	Dispensing Optics-Practical	5	20	80	100		5		5
4.7	SDC4INT16(Pr)	Internship/ Project	4	0	100	100		4		4
Semester IV Total				30			700	21	9	30

Qualification Pack-HSS/Q3001- Vision Technician.

SEMESTER V										
C.No	Course Code	Course Name	Credit	Marks			Hrs/wk			
				Int	Ext	Tot	T	P	Total	
5.1	GEC5NU13	Nutrition	4	20	80	100	4		4	
5.2	SDC5GP17	Geriatric & Pediatric Optometry	4	20	80	100	4		4	
5.3	SDC5CL18	Contact Lens	4	20	80	100	4		4	
5.4	SDC5BV19	Binocular Vision	4	20	80	100	4		4	
5.5	SDC5LV20	Low Vision Aid & Visual Rehabilitation	4	20	80	100	4		4	
5.6	SDC5CLBV21 (P)	Contact Lens & Binocular Vision-Practical	6	20	80	100		6	6	
5.7	SDC5LVGP22 (P)	Low Vision & Geriatric Pediatric Optometry -Practical	4	20	80	100		4	4	
<b>Semester III Total</b>				<b>30</b>			<b>700</b>	<b>20</b>	<b>10</b>	<b>30</b>

SEMESTER VI									
C.No	Course Code	Course Name	Credit	Marks			Hrs/wk		
				Int	Ext	Tot	T	P	Tot
6.1	SDC6INT23 (Pr)	Major Internship (900 hrs.)	30	0	100	100		900	900
<b>Semester VI Total</b>				<b>30</b>			<b>100</b>		<b>900</b>
<b>Grant Total</b>				<b>180</b>			<b>3600</b>		

Qualification Pack-HSS/Q0401- Optometrist