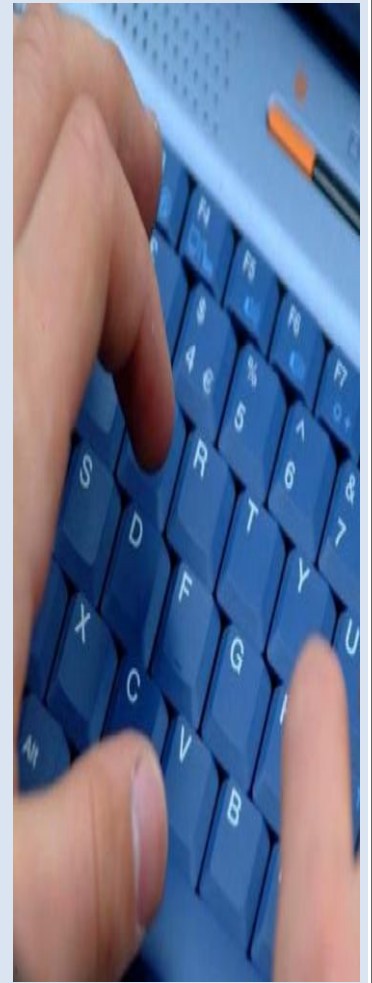# AGGARWAL COLLEGE BALLABGARH

(A Post Graduate Co-educational College)
NAAC Accredited 'A' Grade (CGPA: 3.40)
an ISO 9001:2015 & ISO 14001:2015 Certified College
College with Potential for Excellence (CPE) Status by UGC

SOFTWARE DEVELOPMENT

RETAIL MANAGEMENT

Information Brochure

B.Voc. Programmes

2018

BVOC SD

Message from the Principal 's Desk

Dear Students!!

Welcome to Aggarwal College family!

At the onset, I congratulate all my colleagues and students for the unparalleled achievements in academics and other arenas in recognition to which the UGC has granted the prestigious status of "college with potential for excellence" to our College. Kudos to all for their outstanding contribution !

Aggarwal College Ballabgarh, a name to reckon with, is being run under the auspices of Aggarwal Vidya Pracharni Sabha. It is providing education to the youth of nearby areas for almost 45 years. The college is being run in three wings and is offering a variety of PG, Honours and UG Courses in Arts, Science, Commerce, Electronics, Computer Science, Management etc. Besides these, we continuously add new skill oriented courses to our kitty.

The various courses and co-curricular activities being run in the college help our students in facing the challenges of life ahead with grit and determination.

We provide the latest infrastructure with cutting edge technology to our students for their holistic development and to enable them to keep pace with this highly competition ridden world. We have dedicated and dynamic faculty who help to provide value based skill oriented education to the students in order to develop their spiritual and intellectual personality.

I am quite hopeful that all your dreams are manifested in reality in our college as you enter its portals. May the Almighty shower His blessings on you all !

We welcome you under our tutelage & try to shape you into an altogether different being.

Dr. Krishan Kant Gupta
Principal

Message from Nodal Officer

Dear Students

B.Voc. (Retail Management)and B.Voc. (Software Development) are three year degree courses under the aegis of the UGC, New Delhi. Due to globalization, the consumers in India are gaining a lot due to the entry of multinational corporations in Indian Retail sector. There is a wide scope of employment for skilled persons. This course provides the relevant skills to the students for Retail sector. Beside employment, students can have an option of pursuing PG course in Retail Management.

B.Voc. (Software Development) will prepare the students for successful careers in software development. In India and abroad, there is a need of software enabled people in almost all sectors such as Health and Education, Finance & Stock Exchange, Govt. Sector, Corporate Business, Media and Entertainment etc. This course includes C, C++, Java Advance Java, Visual Basic, NET, ASP, Oracle etc. This Course provides the relevant skills to students in software development. After completing this course, the students can work at various levels such as Software Programmer, System Analyst, Software Consultant, Database Architect, Web Administrator, EDP Manager, EDP In charge or can pursue Post Graduate degree. I wish you all a great success!

Dr. K. L. Kaushik
Nodal Officer
(B.Voc. Courses)

1. Brief History of Dept. of Vocational Studies

It has been a long felt necessity to align higher education with the emerging needs of the economy so as to ensure that the graduates of higher education system have adequate knowledge and skills for employment and entrepreneurship. The higher education system has to incorporate the requirements of various industries in its curriculum, in an innovative and flexible manner while developing a holistic and well groomed graduate. Ministry of HRD, Government of India had issued an Executive Order in September 2011 for National Vocational Education Qualification Framework (NVEQF). Subsequently, Ministry of Finance, in pursuance of the decision of Cabinet Committee on Skill Development in its meeting held on 19th December, 2013, has issued a notification for National Skills Qualifications Framework (NSQF) which supersedes NVEQF.

Under the National Skills Development Corporation, many Sector Skill Councils representing respective industries have/are being established. One of the mandates of Sector Skill Councils is to develop National Occupational Standards (NOSs) for various job roles in their respective industries. It is important to embed the competencies required for specific job roles in the higher education system for creating employable graduates.

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 along with 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.

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, so that they are work ready at each exit point of the programme.
- 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.
- To provide vertical mobility to students coming out of 10+2 with vocational subjects.
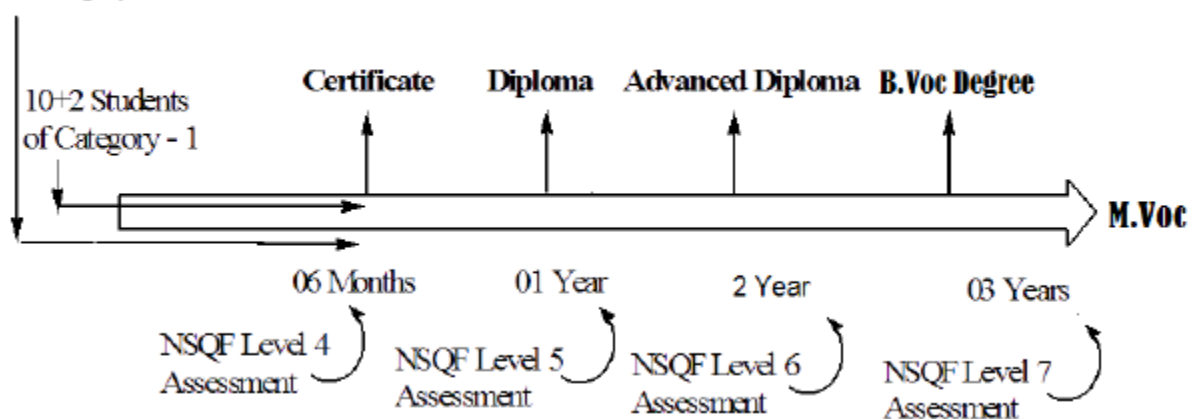
Levels of Awards

 The certification levels will lead to Diploma/Advanced Diploma/B. Voc. Degree in one or more vocational areas and will be offered under the aegis of the University. It would enable the graduates make a meaningful participation in accelerating India's economy by gaining appropriate employment,

becoming entrepreneurs and creating useful knowledge. It aims at imparting skills for employment and entrepreneurship. The focus of skill development shall be to arm the students with appropriate knowledge, practice and attitude, so as to become work ready. The skill development component would be relevant to the industries as per their requirements.

Award	Duration	Corresponding NSQF Level	Job Roles	
			Retail Management	Software Development
Certificate	6 Months	4	Sales Associate	Junior Software Developer
Diploma	1 Year	5	Team Leader	Web Developer
Advance Diploma	2 Years	6	Departmental Manager	Not Specified by SSC
B.Voc Degree	3 Years	7	Store Manager	Software Developer

NSQF Level	Skill Component Credits	General Education Credits	Normal calendar duration	Exit Points / Awards
Year 3	36	24	Six Semesters	B.Voc.
Year 2	36	24	Four semesters	Advanced Diploma
Year 1	36	24	Two semesters	Diploma
TOTAL	108	72		

Assessment of Skill Component under NSQF in Vocational Courses

Department of Vocational studies (B.Voc) launched B.Voc. programmes in B.Voc. (Software development and Retail Management) from 2014 in our college. A student of B.Voc. programme has to go through a pathway from Diploma, Advance Diploma that leads to a

B.Voc. degree after 3 years. The programme launched under the scheme of University Grants Commission on skill development based higher education leading to Bachelor of Vocation (B. Voc.) Degree with multiple exits as Diploma/Advanced Diploma under the National Skill Qualification framework (NSQF). The B.Voc. programme incorporate specific job roles and their National Occupational Standards along with broad based general education.

For B.Voc(Retail Management) Assessment tests are conducted by Retailers' skill council of India(RASCI) and For B.Voc(Software Development)) Assessment tests are conducted by NASSCOM to give certification under the UGC skill development programme, under the National skill qualification framework(NSQF) supervised by National Skill Development Corporation(NSDC) .

2. Admission Procedure

PROCEDURE FOR ADMISSION, MODE OF PAYMENT OF FEE, RESERVATION OF SEATS AND WEIGHTAGES

There is Online Admission process and admission will be strictly on the basis of merit unless or otherwise there are any new guidelines from the government. In case the %age of marks in the qualifying examination is same, the candidate senior in age will be preferred. Failed students shall not be admitted. Compartment cases are not allowed admission in any UG/PG course. The selected candidates will have to deposit their fees in the Bank i.e. after getting the Bank Fee Slip from the College office. After depositing fees in the Bank, the student will have to submit one copy of Bank Receipt immediately to the college office to get class Roll Number.

The student will be allowed to take classes in even semesters (II, IV & VI) only when he/she produces his/her no dues receipt of previous semester.

Punjab National Bank, AVPS, Ballabgarh, The fees for the even semesters will be charged while issuing no dues for the odd semester examinations.

Note: The reservation of seats is as per Reservation Policy of the State Govt. of Haryana and is subject to change/amendment made by the State Govt. from time to time.

Note: A roster register for reservation of seats for ex-servicemen/freedom fighter shall be maintained and carry forward all fractions till one seat is accumulated through different fractions over the years. As and when the total comes to one, a seat will be provided in the Prospectus (Chief Secretary to Govt. Haryana letter No. 23/27/2004-2GS-III dated 05.12.2008). In the event of quota reserved for Physically Handicapped remain unutilized due to non availability of suitable category of handicapped candidates, it may be offered to Ex- Servicemen and their wards (1% and the dependant of Freedom Fighter 1%). Further, 3% reservation is also provided to Ex-serviceman/ Freedom Fighter and their dependants by providing reservation within reservation of 1% of General Category, 1%out of Scheduled Caste and 1% from Backward Classes category for admission to the various educational institutions of the Govt. and Govt. aided / Institutes located in Haryana. As far as Block allocation in Block-A and Block-B of Backward Classes category is concerned year wise rotational system will be adopted. For example if Block-A of Backward Classes are given seats in academic year 2013, the next Block i.e. (B) Block of Category of Backward Classes will be given seats in the next academic year 2014 and so on.

Reservation of seats, in view of Reservation Policy issued by Govt. of Haryana vide Notification No. 22/10/2013-IGSIII dated 28.02.2013, in various programmes offered in Govt./Govt. aided educational/technical/professional institution is as detailed below.

(a) All India Category seats (including Haryana state) (AIO) 15% of the sanctioned intake
(b) State Quota 85% of the sanctioned intake

(b-1) Haryana Open General Category (HOGC) 50% of the State Quota (42.5% of total intake)
(b-2) Reserved Categories of Haryana 50% of State Quota (42.5% of total intake)
Scheduled Caste of Haryana (SC) 20% of State Quota (17% of total intake)
Backward Classes of Haryana (A) (BCA) 16% of State Quota (13.6% of total intake)
Backward Classes of Haryana (B) (BCB) 11% of State Quota (9.35% of total intake)
Physically handicapped of Haryana (PH) 3%of State Quota (2.55% of total intake)

3. Vision, Mission and Core Values of the Department

VISION

To provide job oriented skills using modern Techniques to our students for becoming a change agents in the age of Globalization and Liberalization.

MISSION

To prepare Students conceptually strong, educated and skilled as Retail Manager /Software engineers for leadership in Retail/IT Industries in order to enhance employability of the graduates and meet industry requirements as well as for advanced study.

CORE VALUES

We vow to remain aligned with demand of time through continued dedication and provide need based knowledge/ skills to our students of all walks at an affordable cost.

4. Academic Programs Offered

Academic Programs	Specialization	Intake
Bachelor of Vocational (B.Voc) (With multiple exit options)*	Software Development	50
Bachelor of Vocational (B.Voc) (With multiple exit options)*	Retail Management	50
* After six months - Certificate, After One Year - Diploma, After Two Years - Advance Diploma		

5. Assessment Methods

A) Criteria For External Assessment (University examination)

For appearing in the University Examination a student will have to fulfil the following conditions:
1. He/she must have attended at least 65% of the lectures delivered in each subject of Theory and Practical
separately.
2. He/she must have obtained pass marks in each subject in class tests.
3. He/she must have obtained pass marks in internal assessments.
4. If as a result of re-evaluation a student passes the lower examination or is placed under compartment he may be allowed admission to next higher class only if he is able to complete at least 50% of total lectures/Practical classes delivered and a seat is available and also such a student is otherwise eligible. In addition such a student will be required to attend 65% lectures to be delivered from the actual date of his admission till the end of the session. In genuine cases, the Principal of the College can condone deficiency of lectures in various courses run in affiliated colleges upto 20%. If the Principal of the College is not satisfied with the reasons for the shortage given by a student, it is

not obligatory on his/her part to condone the shortage. The decision of the Principal of the College in the matter shall be final. Below 45% of attendance, the student will in no case be allowed to appear for University Examination.

5. A student who has been detained due to shortage of attendance shall not be allowed to get promoted to the next semester and he/she will be required to take readmission in accordance with the university rules.

B) Criteria of Internal Assessment for B.Voc Courses

The Internal assessment has been made applicable to the students admitted from academic session 2014-15 onwards.

The criteria for Internal Assessment is 40 marks or 40% of theory papers and this applies to all I, II, III, IV,V & VI Semesters of all U.G. Programs. These 40 marks shall be calculated on the following basis.

Seminar Presentation, Class Participation & Assignments 05 marks

Class Attendance 05 marks

House Exam/Surprise Test(s) 10 marks

(i) House Exam/Class Test 10 marks

(ii) Assignment & Presentations (better of two) 05 marks

(iii) Attendance 05 marks

less than 65% 00 marks

upto 70% 02 marks

upto 75% 03 marks

upto 80% 04 marks

upto 85% 05 marks

5A. Progression Scheme in B.Voc

Eligibility	Certificate	Diploma	Advance Diploma	B.Voc Degree
12TH	6 Months Certificates	01 Year Diploma	02 years ADV. Diploma	3 Years Degree
	NSQF Level-4 assessment	NSQF Level-5 assessment	NSQF Level-6 assessment	NSQF Level-7 assessment
	Sales Associate Junior Software Developer	Team Leader Web Developer	Departmental Manager Not Specified by SSC.	Store Manager Software Developer

6.1 Program Outcomes :

PO 1 : The B.Voc. SD programme focuses on all development (theoretical , practical and personality) needs of the students

PO 2 : All contents are Mapped with current I.T Industrial requirements

PO 3 : Total Focus on Practical Knowledge Of Computer Technology. It will help them to create Good Base To Work in I.T Department Jobs

PO 4 : Course base on Projects concerning design, development and maintenance of software. Students
will also learn about the organizational and managerial part of a development process.

PO 5 : Provide Industry orientation for covered syllabus .

PO 6 : They will be able to create Projects with the help of Different Programming Language and DataBase.

6.2 Program Specific Outcomes -

PSO 1 : This program specifically focuses on Students skill improvement with got conceptual Knowledge, Practical Knowledge and communication skill.

PSO 2 : Student will take Industries orientation where they undergo the stages of software development in groups with teamwork and leadership concepts.

PSO 3 : This Program provides education in a variety of programming paradigms, testing, processes, and software development processes, teaching them adaptability and frequent change in industries.

PSO 4 : This Program provides projects design & development, maintenance of software Reenginering
in software with innovation.

PSO 5 : This Program will develop entrepreneurship, creativity and leadership skill in students .

PSO 6 : They will learn about professional ethics and legal aspects of software development in for their future in IT Industries in very

6.3 Scheme of Examination and Curriculum for Bachelor of Vocation (Software Development) w.e.f. 2018-19.

Year –I

Semester-I	Paper Code	Name of Paper	Mode	Category	Credits	External Marks	Internal Marks	Total
SEM1	BVSD-101	c	Theory	Gen. Ed.*	6	60	40	100
SEM1	BVSD-102	PC Software	Theory	Voc. Ed.*	6	60	40	100
SEM1	BVSD-103	Communication Skills	Theory	Gen. Ed.	6	60	40	100
SEM1	BVSD-104	Software Lab-I	Practical	Voc. Ed.	6	60	40	100
SEM1	BVSD-105	Software Lab-II	Practical	Voc. Ed.	6	60	40	100

Note: Paper BVSD – 104 & 105, Practical for External Marks 60 will be conducted by External
Examiner appointed by University.

Semester-II	Paper Code	Name of Paper	Mode	Category	Credits	External Marks	Internal Marks	Total
SEM2	BVSD-106	Data Structure through 'C'	Theory	Voc. Ed.	6	60	40	100
SEM2	BVSD-107	Object Oriented. Programming using C++	Theory	Voc. Ed.	6	60	40	100
SEM2	BVSD-108	Environmental Science	Theory	Gen. Ed.	6	60	40	100
SEM2	BVSD-109	Software Lab-III	Practical	Gen. Ed.	6	60	40	100
SEM2	BVSD-110	Software Lab-IV	Practical	Voc. Ed.	6	60	40	100

Note: Paper BVSD – 109 & 110, Practical for External Marks 60 will be conducted. by External Examiner appointed by University.

Year-II

Semester-III	Paper Code	Name of Paper	Mode	Category	Credits	External Marks	Internal Marks	Total
SEM3	BVSD-201	Web Designing	Theory	Gen. Ed.	6	60	40	100
SEM3	BVSD-202	Java Programming	Theory	Voc. Ed.	6	60	40	100
SEM3	BVSD-203	Visual Programming – Visual Basic, Visual C++	Theory	Gen. Ed.	6	60	40	100
SEM3	BVSD-204	Software Lab-V	Practical	Voc. Ed.	6	60	40	100
SEM3	BVSD-205	Software Lab-VI	Practical	Voc. Ed.	6	60	40	100

Note: Paper BVSD – 204 & 205, Practical for External Marks 60 will be conducted by External Examiner appointed by University.

Semester-IV	Paper Code	Name of Paper	Mode	Category	Credits	External Marks	Internal Marks	Total
SEM4	BVSD-206	Computer Networks	Theory	Gen. Ed.	6	60	40	100
SEM4	BVSD-207	Advanced. Java	Theory	Voc. Ed.	6	60	40	100
SEM4	BVSD-208	PHP Programming	Theory	Voc. Ed.	6	60	40	100
SEM4	BVSD-209	Software Lab-VII	Practical	Gen. Ed.	6	60	40	100
SEM4	BVSD-210	Software Lab-VIII	Practical	Voc. Ed.	6	60	40	100

Note: Paper BVSD – 209 & 210, Practical for External Marks 60 will be conducted by External Examiner appointed by University.

Year – III

Semester-V	Paper Code	Name of Paper	Mode	Category	Credits	External Marks	Internal Marks	Total
SEM5	BVSD-301	RDBMS and Oracle	Theory	Gen. Ed.	6	60	40	100
SEM5	BVSD-302	Mobile Apps Design & Development	Theory	Voc. Ed.	6	60	40	100
SEM5	BVSD-303	Software Engineering	Theory	Gen. Ed.	6	60	40	100
SEM5	BVSD-304	Software Lab-IX	Practical	Voc. Ed.	6	60	40	100
SEM5	BVSD-305	Software Lab-X	Practical	Voc. Ed.	6	100		100

Note: Paper BVSD – 304 & 305, Practical for External Marks 60 will be conducted by External Examiner appointed by University.

Semester-VI	Paper Code	Name of Paper	Mode	Category	Credits	External Marks	Internal Marks	Total
SEM6	BVSD-306	Computer Graphics	Theory	Gen. Ed.	6	60	40	100
SEM6	BVSD-307	.NET Programming	Theory	Voc. Ed.	6	60	40	100
SEM6	BVSD-308	Artificial Intelligence	Theory	Gen. Ed.	6	60	40	100
SEM6	BVSD-309	Software Lab-XI	Practical	Voc. Ed.	6	60	40	100
SEM6	BVSD-310	Project Work & Viva-Voce	Industrial Project	Voc. Ed.	6	100		100

Note: 1.Paper BVSD – 309Practical for External Marks 60 will be conducted by External Examiner appointed by University.

2.Paper BVSD – 310 Project work and Viva Voce, the Project will be allocated at the end of the B.Voc. (Software Development) V Semester under the guidance of faculty of the concern College and the software Industry expert and Comprehensive Viva-Voce will be Conducted by External Examiner to be appointed by the University.

*Gen. Ed. – General Education & Voc. Ed. – Vocational Education.

6.4 Course Outcomes (COs)

BVSD-101: Computer Fundamentals and Programming in 'C'

Course Outcomes (COs) :

CO 1 : Student will be able to understand the basic Fundamentals of Computers, its application, types of Computers, Different Operating Systems in real life.

CO 2 : Students will be able to learn the problem solving by using If else , Switch as well as with the help Of looping concepts (by Using for, while, do while Loops) and C programming fundamentals.

CO 3 : Student will be able to understand the concepts of Different types of Arrays and Use of Different Types of function Such as User Defined and Build In Functions Available in C language.

CO 4 : Student will be able to understand the concepts of Structures and union in C Language and will be able to understand as well as implement the concept of File Handling in C Language.

BVSD-102: PC Software

Course Outcomes (COs) :

CO 1 : The course provides basic knowledge of computers, its installation, the fundamental hardware components and the role of each of these components that helps in future aspects

CO 2 : It helps students to represent their documents in better and effective form and helps them to use basic and advance features provided by MS-Word

CO 3 : Students get the theoretical knowledge of use of various functions, formulas that can be further implemented to make their documents more readable. Charts, pivot tables etc features can be incorporated through MS-EXCEL

CO 4 : Ability to present their data in form of slides that helps students in job point of view. MS Access provides ability to maintain the database that helps students in various courses also.

BVSD- 103: Communication Skills

Course Outcomes (COs) :

CO 1 : Familiarize with the basics of Communication, process, barriers, models and theories of communication.

CO 2 : Understands the verbal and nonverbal communication, oral presentation, self-presentation that boost their overall personality and self- confidence. Also they get to know the importance of body language.

CO 3 : Ability to learn vocabulary, prefix/suffix, synonyms/antonyms, one word. substitution, spellings.Also develop fluency by using correct grammar that improves their written communcation ability.
CO 4 : Ability to gain proper use of Language. Knowledge to attend and behave in interviews and also learn presentation skills.

BVSD-104: Software Lab-I

Course Outcomes (COs) :

CO 1 : Students will be able to understand the Computer Crimes and different types of Viruses in computer.They get to know the installation of various operating systems as well as various software.

CO 2 : Student will be able to understand to create a Simple Program using . Looping with the help of for, while, do while loops, and able to solve decision making problem using if else , Switch, nested if else.

CO 3 : Student will be able to understand how to create and use Arrays and Functions such as user defined and built-in. They get to know the concept of reusability of code.

CO 4 : Student will be able to create a Structure and Union in C Program and will be able to solve errors. Get to know about the user defined type. Students learn to take input and to produce output with the help of files.

BVSD-105: SOFTWARE LAB-II

Course Outcomes (COs) :

CO 1 : Provides hardware and software installation and to change the settings of desktop. Students get to know to create user accounts, set password, date and time settings etc.

CO 2 : Able to design text documents in better and enhanced form. Incorporate advance feature in the text documents.

CO 3 : Able to represent data in tabular and graphical form. Implement advance features such as lookup functions, pivot table etc.

CO 4 : Get to know the arrangement of data in slides, use animations, custom animations etc. Get to know the maintenance of database and its connectivity which is used at higher levels to create projects.

Semester-2

BVSD-106: Data Structure through 'C'

Course Outcomes (COs) :

CO 1 : Students will be able to understand introduction, algorithm complexity, Linked list operations in detail

CO 2 : Students will be able to learn the concepts of Stack, Queue and all the different types of tree and operations on them in detail.

CO 3 : Student will be able to understand the concepts Graph, sorting and searching in Detail.

CO 4 : Student will be able to understand the concepts of Files & its type, Storages devices, hashing in detail.

BVSD-107: Object Oriented Programming using C++

Course Outcomes (COs) :

CO 1 : Get to know the basic coding techniques, features, control loops, basic initialization and declaration of variables as it provides direct communication swith the hardware.

CO 2 : Learn usage of functions, creation of classes, real life implementation into C++ codes, concept of polymsorphism, usage of inline functions that improves efficiency of the code.

CO 3 : Able to learn the basis for designing codes and to reuse the codes with the inheritance features, use of constructors, accessing of class members through object, dynamic binding.

CO 4 : Get to know the most important feature of pointers, templates, handling of errors. Develop students' basis of coding. Learn the use of generic classes with templates.

BVSD-108: Essentials 0f Environmental Studies

Course Outcomes (COs) :

CO 1 : Students will be able to understand .about the components of environment,natural resources and role of an individual in conservation of natural resources.

CO 2 : Students will be able to understand about the components of an ecosystem and they have the knowledge of environmental pollutants, causes, impacts of various types of pollution like air pollution ,water pollution, noise pollution etc. And the role of an individual in minimization of environmental pollution.

CO 3 : Students will be able to understand about the global environmental problems like ozone layer depletion, acid rain , green house effect, resettlement and rehabilitation etc.

CO 4 : Students will be able to understand about environmental legislation like environmental protection act , air act, water act, and many more.

BVSD-109: Software Lab-III

Course Outcomes (COs) :

CO 1 : Students will be able to create different types of arrays and perform   operations on them and they will be able to perform different operations on linked list like insertion, deletion, merging, sorting etc.

CO 2 : Student will be able to Perform the different Operations on Queue, priority queue, circular queue etc. and Tree. They will be able to write the programs for various types of trees like b trees, b+ trees, AVL tree.

CO 3 : Student will be able to Perform searching and sorting Algorithm. They can write program for heap sort, merge sort.

CO 4 : Student will be able to Perform tasks on File Handling and Hashing. They actually get the practical knowledge of data storage in computer memory.

BVSD-110: SOFTWARE LAB -IV

Course Outcomes (Cos) :

CO 1 : Get to know the implementation of basic coding features, initialization of variables.

CO 2 : Develop the habit of coding in an effective manner with the use of loops, control statements, inheritance, pointers, templates etc.

CO 3 : Able to design codes for various applications.

CO 4: Get to knows the practical implementation of codes and to create projects, games etc.

Semester-3

BVSD-201: WEB DEVELOPMENT

Course Outcomes (COs) :

CO 1 : Provides basic features of a webpage, website, web server. Get to know about the IP address, its classes, HTTP, errors related to HTTP, various versions of   it.

CO 2 : Learn theoretical knowledge to publish websites, getting DNS, webcasting techniques. Get to know about all the minute details of hosting a website.

CO 3 : Basic knowledge of HTML, usage of tags, setting backgrounds for websites etc. Students learn about the various tags involved. Syntax of various graphics tags and text editing tags can be learned in HTML.

CO 4 : Learn various tags, styling techniques, attributes and basic knowledge of java script format. Various types of CSS Selectors, types of styles that can be incorporated into the HTML file to decorate a webpage.

BVSD-202: JAVA Programming

Course Outcomes (COs) :

CO 1 : Student will be able to understand the basic concepts of object oriented Programming, history and comparison of java with other languages .

CO 2 : Students will be able to understand the basics terminologies, Decision Making and branching in java. Students will be able to learn the problem solving by using If else, Switch as well as with the help Of looping concepts (by Using for, while, do while Loops)

CO 3 : Student will be able to understand the concepts of abstraction, encapsulation , Different Types Of inheritance in java. Student will be able to understand and implements Arrays, Vector, and Multithreading. They can also perform the Different Operations on String also

CO 4 : Student will be able to handle the Exceptions and error, I/o handling in java. They can also get the Knowledge of Applet Programming and Graphics Programming

BVSD-203: Discrete Mathematics

Course Outcomes (COs) :

CO 1 : Write set notation to indicate whether an object is, or is not, an element of a set. Perform the set operations of complement, intersection, union and set difference when given several sets. Visualize sets in a Venn diagram and   determine the areas in the diagram that represent a given set where the set is written as a combination of set operations. Analyze a survey problem by making a Venn diagram and answering questions related to the survey.

CO 2 : Students completing this course will be able to express a logic sentence in terms of predicates, quantifiers, and logical connectives. Know the rules of logic – negation, conjunction, disjunction, conditional and bi conditional – and apply them to determine the truth value of a given statement. Students completing this course will be able to apply the rules of inference and methods of proof including direct and indirect proof forms, proof by contradiction.

CO 3 : Have a better understanding of sets, functions, and relations. Students will be able to simplify, evaluate and analyze functions and expressions. Students will be able to model real situations using functions.

CO 4 : Present the theory of finite automata, as the first step towards learning advanced topics. Demonstrate different traversal

BVSD-204: SOFTWARE LAB -5

Course Outcomes (COs) :

CO 1 : Learn to design websites, web pages with the help of basic tags that help in writing concise and efficient codes.

CO 2 : Able to create links, to set source, designing for the links, lists, different types of lists available according to the need of data that is to be represented, tables, to include heading, captions, use of cols pan, rows pan etc. to enhance the designing of websites.

CO 3 : Able to implement various graphics features in the web pages with the help of graphics tags. WebPages can be designed more effectively with the use of various text editing and formatting tags.

CO 4 : Get to design the web pages with the help of CSS, Java Script. Get to know the designing of user interactive forms used for various registration purposes. Students get to know the creation of different types of dialog boxes and can include various events and actions.

BVSD-205: Software Lab-VI

COURSE OUTCOMES (COs) :

CO 1 : Students will be able to create a simple java programs using Different Data types, Tokens and they can get the Practical Knowledge Of Byte Code, Java Development Kit also

CO 2 : Student will be able to solve Decision making problems by using looping with the help of for, while, do while loops They can also solve real life problems like eligibility or any other condition based decision by using if else, switch statements

CO 3 : Student will be able to Perform the Operations on Arrays, Vector, multithreading. They can also perform different operations on String so that they can Store, Access and manipulate the real life Data By Java

CO 4 : Student will be able to Understand and Manage Error, Exception. After that they will be able to handle and Solve any Exception in Program .They can also able to Perform different types of operation on File by Java Program. they will be able to access any file by using Java Program

Semester-4

BVSD-206: Computer Network

Course Outcomes (Cos) :

CO 1 : Students will be able to understand the Introduction to communications and Networking , Information encoding in detail

CO 2 : Student will be able to understand the Analog and digital transmission methods, Modes of data transmission and Multiplexing , Transmission Errors in detail.

CO 3 : Student will be able to understand different Transmission media, Network topologies, switching and routing algorithms in detail.

CO 4 : Student will be able to understand different Networking protocols and OSI model in detail.

BVSD-207: Advance JAVA

Course Outcomes (Cos) :

CO 1 : Familiarize with the basic components of Core Java concepts

CO 2 : Understands the concept of JDBC and able to connect java code with database and also under stand client server relations necessary for a project.

CO 3 : Ability to understand User Interface for a Java Desktop Applications.

CO 4 : Able to understand concept and importance for Bean class in java.

BVSD- 208 : PHP Programming

Course Outcomes (Cos) :

CO 1 : Familiarize with the basic concepts of PHP and able to develop program by using PHP scripts.

CO 2 : Understands the conditions and iterations process in programming and implement them.

CO 3 : Ability to learn knowledge about arrays and their functions and also make use of date and time functions .

CO 4 : Ability to make use of files and directories and also familiar with database and Error handling.

BVSD- 209 : Software Lab-VII

Course Outcomes (Cos) :

CO 1 : Familiarize with the basic concepts of Core Java practically.

CO 2 : Able to connect java code with database and also understands client server relations necessary for a project.

CO 3 : Ability to develop User Interface for a Java Desktop Applications.

CO 4 : Able to develop Bean class in java.

BVSD- 210 : Software Lab-VIII

Course Outcomes (Cos) :

CO 1 : Familiarize with the basic concepts of PHP and able to develop program by using PHP scripts.

CO 2 : Understands the conditions and iterations process in programming and implement them.

CO 3 : Ability to learn knowledge about arrays and their functions and also make use of date and time functions .

CO 4 : Ability to make use of files and directories and also familiar with database and Error handling.

Semester -5

BVSD-301 : RDBMS and Oracle

Course Outcomes (Cos) :

CO 1 : Students will be able to analyze database design and basics of Data Models, methodology and understand the application of database system in real life.

CO 2 : Student will be able to understand the overview of oracle 9i and will be able to understand the data definition language (DDL) commands.

CO 3 : Student will be able to understand how to retrieve and manage the data by using the concept of dm commands they can Operation Like Functions, Joins, Grouping on data in Database.

CO4 : Student will be able to understand the relationship between pl and sql language languages .they can get the Knowledge of Control Structures and Embedded SQL.

BVSD-302 : Visual Programming-Visual Basic ,Visual C++.

Course Outcomes (Cos) :

CO 1 : The contents will support to learn basic programming using GUI(Graphical User Interface) with the help of IDE (integrated development environment). This course provide the Event Driven programming so that student can understand that how real application are working in industry.

CO 2 : The contents will provide the knowledge to integrate various component and   tool to the application which help the students in their higher education in Advance or upgraded software which is used in mobiles and other gadgets

CO 3 : In this content student will create their own event and procedures also learn the combine use of machine and logics. It will help them to identify and apply the concept in actual use of practical applications especially in industry.

CO4 : The contents will provide the visual way of working with traditional languages . Management of data with programming which is day to day requirements of an industry. The content will also explore the Microsoft Library and their use in real applications like Bank, Education Sector ,Hospital etc.

BVSD-303 : Software Engineering

Course Outcomes (Cos) :

CO 1 : Familiarize with the basic components of Software Processes and ability to understand the requirements of a software system.

CO 2 : Demonstrate the ability to work effectively as a team member and/or leader in an ever-changing professional environment

CO 3 : Able to analyze requirements of a software system and solve them by using various software modeling techniques.

CO 4 : Efficient to understand how to plan and manage various software and complete them within deadline of a Project.

CO 5 : Efficient to learn various Testing techniques to debug and test a software project.

CO 6 : Ability to analyze, design, verify, validate, implement, apply, and maintain software systems.

CO 7 : Ability to analyze estimate Size and cost of a software project by the cost estimation techniques.

CO 8 : Able to understand how Developers can work in various software industries as in professional environment.

BVSD-304 : Software Lab-IX

Course Outcomes (Cos) :

CO 1 : Understand the applications of DBMS, difference between file systems vs. DBMS, identify the data models ,understand DBMS structure.

CO 2 : Understands the relational algebra concepts, selection ,projection ,relational calculus which helps in understanding queries

CO 3 : Able to learn DDL commands, DML commands, queries

CO 4 : Understands the need of normalization, Normal forms I,II,III,IV BCNF

CO 5 : Able to write PL/SQL block of different queries in a single block and nested blocks.

BVSD-305 Software Lab-X

Course Outcomes (Cos) :

CO 1 : It helps to understand the use of IDE(integrated development environment). Creates their own Apps with basic features.

CO 2 : Implement various component and tool to their application and create a small stand alone software which they can use in their daily life also they can make some small gaming product with the help of these contents.

CO 3 : Helps to understand the code implementation in arrays and loops. Students get to know the concept of functions, data files. These concept help in searching files in system and other application on disk..

CO4 : Students get to implement the concept of MFC, its various functions. They learn the database connectivity in the project with the help of MS- SQL Server and ODBC connectivity.

Semester-6

BVSD-306 : COMPUTER GRAPHICS

Course Outcomes (Cos) :

CO 1 : Learn the basic working of monitors, input devices, output devices, how the system make use of them.

CO2 : Learn point, line, circle drawing algorithms, various polygon filling algorithms presented by various scientists..

CO 3 : Able to view the live things in 2-D and 3-D ways with the help of 2-D and 3-D viewing techniques. Learn usage of clipping algorithms.

CO 4 : Get to know the various geometric transformations, curves from the point of coding that are used in daily life.

BVSD- 307 : .NET Programming

Course Outcomes (Cos) :

CO 1 : Familiarize with the basic concepts of .NET Programming and how to implement and work with concepts..

CO 2 : Able to understands use of data types, and also learn to stop abnormal terminations via using exception handling.

CO 3 : Able to learn Object Oriented Concepts and implement them in a programming way.

CO 4 : Able to make and design User interface for their Applications which includes forms, all types of buttons etc.

BVSD-308 : ARTIFICIAL INTELLIGENCE

Course Outcomes (Cos) :

CO 1 : Able to understand the basic meaning of artificial intelligence which is the basis of today's technology and robotics. Learn the interaction of machines with each other.

CO 2 : Learn to develop the basic intelligence into machines just like human beings and animals. It provides the techniques to develop the brain that can work as human beings' work.

CO 3 : Develop the techniques used in language processing. Learn to design machines that can work on human orders.

CO 4 : Get to understand the actual problem and to check its progress with the help of various production system and various search techniques.

BVSD-309 : SOFTWARE LAB- XI

Course Outcomes (Cos) :

CO 1 : Implementation of point, line, circle drawing algorithms, various polygon filling algorithms in C language.

CO 2 : Implement various transformations, clipping algorithms that helps in animations. Able to create designs for aircrafts, buildings, machines with the use of graphics.

CO 3 : Helps students to create real life projects and to implement them.

CO 4 : Implement codes to design and develop websites and to place them on the server.

BVSD- 310: Project Work & Viva-Voce

Course Outcomes (Cos) :

CO 1 : Objective of Project work is to gain industrial knowledge on the implementation of the various software development concepts.

CO 2 : Each and Every student will have assign individually one Project Work and they have made them by using the software tools/ languages that they have learned..

CO 3 : Able to gain practical knowledge and implement all learning concepts in form of a application.

CO 4 : Also Able to make and design User interface for their Applications which includes forms, all types of buttons, database etc. Able to access data from file . Perform real life functions like take input from user ,perform operation on data accordingly and provide require output to the user.

6.5 PROGRAMME OUTCOMES (Pos)

PO1: Leads to Bachelor of Vocation (B.Voc) Degree with multiple entry and exit points.

PO2: Incorporates specific job roles along with broad based general education.

PO3: Enables 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.

PO4: The graduated students acquire adequate knowledge and skills to enhance employability and meet industry requirements.

PO5: Demonstrate knowledge and understanding of the management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO6: The graduated student is able to
i. demonstrate products to customers and help customers choose right products
ii. Identify suitable opportunities to tell the customer about associated or additional products and provide specialist support to customers facilitating purchases.
iii. Gather relevant and accurate information about the effectiveness of promotions and communicate this information clearly to the right person.
iv. Resolve customer concerns and improve customer relationship.

6.6 PROGRAMME SPECIFIC OUTCOME

PSO 1: The B.Voc. Program in Retail Management is for a duration of three years consisting of six semesters and is a judicious mix of skills relating to professional education and general education on credit based system.

PSO 2: The successful students will be awarded Certificate/Diploma/Advanced Diploma/Degree in both Skills and General education components of the Curriculum.

PSO 3: Students may exit after six months with certificate (NSQF Level 4) or may continue for diploma or advance diploma level courses.

6.7 Scheme of Examination and Revised Curriculum for Bachelor of Vocational (Retail Management) for Session 2017-18

Year-I

Semester-I	Paper Code	Name of Paper	Mode	Category	Credit	External Marks	Internal Marks	Total
SEM 1	BVRM-101	English	Theory	Gen Ed*	5	60	40	100
SEM 1	BVRM -102	Basics of marketing	Theory	Gen Ed	5	60	40	100

SEM 1	BVRM -103	Fundamentals of Customer Services	Theory	Voc Ed	5	60	40	100
SEM 1	BVRM -104	Basics of Retailing	Theory	Voc Ed	5	60	40	100
SEM 1	BVRM -105	Project Work (Safety methods at work Place)	Practical	Voc Ed*	5	100		100
SEM 1	BVRM-106	Computer Practicals-I (MS-Office)	Practical	Voc Ed	5	100		100

Note: BVRM -105 Paper will be evaluated on the basis of Project report and Viva-voce by external examiner.

Paper BVRM -106 Computer Practicals-I, 50 Marks will be for Computer Practical File and 50 marks will be for Practical (Ms-Word and MS- Excel) to be conducted by External Examiner appointed by University.

Semester-II	Paper Code	Name of Paper	Mode	Category	Credit	External Marks	Internal Marks	Total
SEM 2	BVRM -107	Computer Application in Retail Business	Theory	Gen Ed	5	60	40	100
SEM 2	BVRM -108	Fundamental of Accounting	Theory	Gen Ed	5	60	40	100
SEM 2	BVRM -109	Environmental Studies	Theory	Gen Ed	5	60	40	100
SEM 2	BVRM -110	Business organisation and management	Theory	Voc Ed	5	60	40	100
SEM 2	BVRM -111	Project Work (Health and Hygiene at work place)	Practical	Voc Ed	5	100		100
SEM 2	BVRM -112	Store Operations-I	Practical Training	Voc Ed	5	100		100

Note: BVRM -111 Paper will be evaluated on the basis of Project report and Viva-voce by external examiner.

Paper BVRM -112 Store Operations-I, the students shall proceed for their store operations training of two weeks duration during the semester. The students are required to prepare a Training Report which shall be evaluated by External Examiner at the time of viva-voce.

Year – II

Semester-III	Paper Code	Name of Paper	Mode	Category	Credit	External Marks	Internal Marks	Total
SEM 3	BVRM -201	Business communication	Theory	Gen Ed	5	60	40	100
SEM 3	BVRM -202	Basic Maths and Statistics	Theory	Gen Ed	5	60	40	100
SEM 3	BVRM -203	Customer Relationship	Theory	Voc Ed	5	60	40	100

		Management						
SEM 3	BVRM -204	Retail Management	Theory	Voc Ed	5	60	40	100
SEM 3	BVRM -205	Project Work (customer needs and satisfaction)	Practical	Voc Ed	5	100		100
SEM 3	BVRM -206	Computer Practical-II-Ms- Powerpoint & Internet)	Practical	Gen Ed	5	100		100

Note: Note: BVRM -205 Paper will be evaluated on the basis of Project report and Viva-voce by external examiner.

Paper BVRM -206 Computer Practical-II, 50 Marks will be for Computer Practical File and 50 marks will be for Practical (MS-PowerPoint & Internet) to be conducted by External Examiner appointed by University.

Semester-IV	Paper Code	Name of Paper	Mode	Category	Credit	External Marks	Internal Marks	Total
SEM 4	BVRM -207	Business Economics	Theory	Gen Ed	5	60	40	100
SEM 4	BVRM -208	Human Resources Management	Theory	Gen Ed	5	60	40	100
SEM 4	BVRM -209	Supply Chain Management	Theory	Voc Ed	5	60	40	100
SEM 4	BVRM-210	Consumer Behaviour	Theory	Voc Ed	5	60	40	100
SEM 4	BVRM -211	Project Work	Practical	Voc Ed	5	100		100
SEM 4	BVRM -212	Store Operations-II (Including Warehouse)	Practical Training	Voc Ed	5	100		100

Note: Note: BVRM -211 Paper will be evaluated on the basis of Project report and Viva-voce by external examiner.

Paper BVRM-212 Store Operations-II, the students shall proceed for their store operations training of two weeks duration during the semester. The students are required to prepare a Training Report which shall be evaluated by External Examiner at the time of viva-voce.

Year - III

Semester-V	Paper Code	Name of Paper	Mode	Category	Credit	External Marks	Internal Marks	Total
SEM 5	BVRM-301	Personality and soft skill development	Theory	Gen Ed	5	60	40	100
SEM 5	BVRM -302	Store Layout and Design	Theory	Voc Ed	5	60	40	100
SEM 5	BVRM -303	Organisational behaviour	Theory	Gen Ed	5	60	40	100
SEM 5	BVRM -304	Elements of Salesmanship	Theory	Voc Ed	5	60	40	100
SEM 5	BVRM -305	Tally	Practical	Gen Ed	5	100		100
SEM 5	BVRM -306	Summer Training	ST Report	Voc Ed	5	100		100

Note: 1. Paper BVRM-305 Tally, 50 Marks will be for Practical File and 50 marks will be for Practical (Tally) to be conducted by External Examiner appointed by University.

2. Paper BVRM -306 Summer Training, the students shall proceed for their summer training of four weeks duration immediately after the completion of IV Semester examinations. The summer training reports prepared after the completion of the training shall be assessed in the V Semester during viva-voce to be conducted by the External Examiner.

Semester-VI	Paper Code	Name of Paper	Mode	Category	Credit	External Marks	Internal Marks	Total
SEM 6	BVRM -307	Merchandise buying and planning	Theory	Voc Ed	5	60	40	100
SEM 6	BVRM -308	Retail Operations	Theory	Voc Ed	5	60	40	100
SEM 6	BVRM -309	Entrepreneurship Development	Theory	Gen Ed	5	60	40	100
SEM 6	BVRM -310	Advertising and Brand management	Theory	Gen Ed	5	60	40	100
SEM 6	BVRM -311	Fundamentals of Visual Merchandising (VM)	Practical Training	Voc Ed	5	100		100
SEM 6	BVRM -312	Comprehensive Viva-Voce	Viva-Voce	Voc Ed	5	100		100

Note: 1. Paper BVRM-311 Fundamentals of Visual Merchandising (VM), the students shall proceed for their training of two weeks duration during the 6th semester. The students are required to prepare a Training Report which shall be evaluated by External Examiner at the time of viva-voce.

2. Paper BVRM-312 Comprehensive Viva-Voce will be conducted by External Examiner to be appointed by the University.*Gen Ed: General Education; Voc Ed: Vocational Education.

6.8 COURSE OUTCOMES

B.Voc – RM

SEMESTER 1

English (BVRM-101)

CO1 : Writing Skills including Resume Writing, Project Report writing
CO2 : Reading Skills, Oral Communication (Internal & External)

Basics of Marketing (BVRM-102)

CO1 : Analysing Features and Benefits of Products
CO2 : Discuss the need for increasing sales and promotions
CO3 : Appreciate seasonal trends and their impact on sales
CO4.: Explain the difference between product features and benefits
CO5 : List different ways of promoting products

Fundamentals of Customer Services (BVRM-103)

CO1 : Implementing Changes in Customer Service Standards
CO2 : Collecting , analysing and presenting customer feedback
CO3 : Implementing Changes in Customer Service Standards
CO4 : Discuss the use of the analysis and interpretation of implemented changes in customer service standards to identify further opportunities for improvement

Basics of Retailing (BVRM-104)

CO1 : Work Effectively in a Retail Team
CO2 : Plan and Organise Work Routine
CO3 : Understand Retail Store Management and its Value Chain
CO4 : Student will be able to Define Retailing,Evolution of Retail in India ,Indian Retail Industry
CO5 : Organized and Unorganized Retail Sector ,Types of Retail Formats,Pre-Store Opening,Store Opening and Closing ,Loss Prevention & Shrinkage,Store Merchandise Handling ,Basics of Visual Merchandising

Project Work (Safety methods at work Place) (BVRM-105)

CO1 : To learn students the practical tactics of retail business
CO2 : To process credit applications for purchases
CO3 : To help maintain healthy and safety
CO4 : To provide specialist support to customers facilitating purchases
CO5 : To organise the delivery of reliable service

Computer Practicals-I (MS-Office) (BVRM-106)

CO1 : To enhance the knowledge about the usage of the Computer and IT   in retail business
CO2 : To Understand How to maintain customer database

SEMESTER 2

Computer Application in Retail Business (BVRM-107)

CO1 : Enhanced knowledge about the usage of the MIS in retail business

Fundamental of Accounting (BVRM-108)

CO1 : This paper is aimed at providing comprehensive knowledge of maintenance of accounts under different agreements.
CO2 : Manage a budget
CO3 : To maintain the availability of goods for sale to customers

Environmental Studies (BVRM-109)

CO1 : This Course is aimed at providing a comprehensive knowledge of mechanism of Ecological System
CO2 : To maintain health and safety

Business organisation and management (BVRM-110)

CO1 : This course will impart conceptual knowledge of different forms of Business   Organizations
CO2 : To process the sale of products
CO3 : To work effectively in your organization
CO4 : To communicate effectively with stake holders

Project Work (Health and Hygiene at work place) (BVRM-111)

CO1 : Overview of Various Departments in any retail setup
CO2 : To process credit applications for purchases
CO3 : To organise the delivery of reliable service
CO4 : Follow the health and safety requirements laid down by company and by law, and encourage colleagues to do the same.

Store Operations-I (BVRM-112)

CO1 : Inventory Management , Merchandise Management
CO2 : Develop Sales Strategy and Campaigns ,plan visual merchandise
CO3 : Monitor and manage store performance, Manage a budget

SEMESTER 3

Business communication (BVRM-201)

CO1 : Explaining Product Features and Benefits to Customers to Promote Sales and Goodwill
CO2 : Helping Customers Choose Products and Handling Customer Queries
CO3 : Collecting and Interpreting Customer Responses and Acknowledging Customer Buying Decision

Basic Maths and Statistics (BVRM-202)

CO1 : After learning the contents of this course, student should be able to perform mathematical, logical calculations required for decision making in day today retail business.
CO2 : Monitor and manage store performance
Customer Relationship Management(BVRM-203)
CO1 : This course will enable the students to learn the basics of Customer Relationship Management.
CO2 : Understood Relationship Marketing Learnt Sales Force Automation Learnt Database Marketing
CO3 : To provide specialist support to customers facilitating purchases

Retail Management (BVRM-204)

CO1 : This Course is aimed at providing students with a comprehensive understanding of the theoretical and applied aspects of retail management.
CO2 : Establish and satisfy customer needs
CO3 : Monitor and manage store performance
CO4 : Provide leadership for your team
CO5 : To maintain the availability of goods for sale to customers
CO6 : To help customers choose right products

Project Work (customer needs and satisfaction) (BVRM-205)

CO1 : Overview of Various Departments in any retail setup
CO2 : To Plan visual merchandise, monitor and manage store performance
CO3 : Develop individual retail service opportunities

Computer Practical-II (Ms- Powerpoint & Internet) (BVRM-206)

CO1 : Student will be able to Create an e-mail id and check the mail inbox.
CO2 : Working with E-Commerce websites, shopping cart, online shopping.
CO3 : Web Designing: , HTML ,Basic structure of HTML document, creating HTML document, Heading Tags, formatting tags, HTML tags, working with lists, tables, hyperlinks, images.
CO4 : Create a simple website.
CO5 : Design presentation slides about an organization and perform frame movement by interesting clip arts to illustrate running of an image automatically.
CO6 : Design presentation slides for the Seminar/Lecture Presentation using animation Effects and perform the retailing operations.

SEMESTER IV

Business Economics (BVRM-207)

CO1 : This course aims to make the student understand how the business organizations work by applying economic principles in their Business Management.
CO2 : Provide input to the merchandising /category teams on best prices offered by competitors
CO3 : Identify and describe all policies related to collection of market data

Human Resources Management (BVRM-208)

CO1 : Job Role of Team Leader and skill sets of a competent Team Leader
CO2 : Understanding Company Policies and Procedures
CO3 : Work effectively in your Team and in your organization

Supply Chain Management (BVRM-209)

CO1 : To create awareness about the supply chain activities taken in order to deliver the goods
CO2 : To organise the delivery of reliable service
CO3 : To maintain the availability of goods for sale to customers

Consumer Behaviour (BVRM-210)

CO1 : To impart conceptual knowledge about consumer behaviour and other related issues.
CO2 : To help customers choose right products
CO3 : To create a positive image of self and organisation in the customers mind
CO4 : To resolve customer concerns, to improve customer relationship
CO5 : To demonstrate products to customers.

Project Work (BVRM-211)

CO1 : Managing Retail Operations, learn to measure productivity & Operating Efficiency
CO2 : Controls Essential for successful operations, Measuring Performance,Stock Turn
CO3 : Describe the opportunities for up-selling, Explain about opportunities of cross-selling
CO4 : List various ways of pitching for up-selling and cross- selling
CO5 : Identify customers' requirements for additional associated products

Store Operations-II (Including Warehouse) (BVRM-212)

CO1 : Understand significance of proper maintenance of store
CO2 : Understand methods of using cleaning equipment
CO3 : Recognise the importance of clean store
CO4 : Perpetuate personal hygiene at work

SEMESTER V

Personality and soft skill development(BVRM-301)
CO1 : After completion of the course students will be familiar with different aspects of personality and role of soft skills in personality development.
CO2 : Students will be familiar with Psychology and Success, Self-Awareness, Goals and Obstacles, Positive Thinking, Self-Motivation, Managing your resources

Store Layout and Design (BVRM-302)

CO1 : This Course is aimed at providing comprehensive knowledge of Store Location, layout and operations
CO2 : Explain store policy and procedures in regards to health, hygiene and safety clearly and accurately
CO3 : Create awareness on 'Prevention of Sexual Harassment' and enforce adherence to policy Adhere to standard
CO4 : Operating procedures, processes and policies at the store while ensuring timely and accurate reporting
CO5 : Ensure overall safety, security and hygiene of the store role and importance of merchandise display in attracting customers

E-Commerce (BVRM-303)

CO1 : This course will make students understand the concepts and Application of E-Commerce
CO2 : Performing Online transactions
CO3 : Handling Websites

Elements of Salesmanship(BVRM-304)

CO1 : Product and Service Knowledge
CO2 : Retail markets - Competition and Best Practices
CO3 : Availability of goods for sale to customers
CO4 : Process Sale of Products Goal Setting / Target Allocation & Monitoring
CO5 : Customer Experience Management Establish and satisfy customer needs

TALLY(BVRM-305)

CO1 : With this course students will be able to Create a new company, group, voucher and ledger and record transactions and display the relevant results.
CO2 : Preparing trial balance, Profit and Loss A/c and Balance Sheet.
CO3 : Preparing inventory statement using (Calculate inventory by using all methods)

Summer Training (BVRM-306)

CO1 : After this course the student will be able to understand the role and significance of training and development in Store Operations.
CO2 : Understanding the Skills required for effective Training delivery

SEMESTER VI

Merchandise buying and planning (BVRM-307)

CO1 : Store Merchandise Handling and Basics of Visual Merchandising
CO2 : Explain assembling of products before display
CO3 : Know about safe transfer of merchandise to display area
CO4 : Learn to review product condition
CO5 : Explain cleanliness of display area, accessories and equipment
CO6 : Elaborate estimation of quantity for products to be displayed
Retail Operations (BVRM-308)

CO1 : Monitor operations against defined targets of the department
CO2 : Report factors influencing effectiveness of department
CO3 : Create new and effective ways of improving the visual effect of displays
CO4 : Check that the quality of the products and customer service are maintained
CO5 : Make recommendations to improve retail operations
CO6 : Identify procedures to create a Budget

Entrepreneurship Development (BVRM-309)
CO1 : Student will be able to make the students to prepare business plans.
CO2 : Retail Store Management and its Value Chain Optimize inventory to ensure maximum availability of stocks and minimized losses .
CO2 : Student will be able to identify the financial helps provided by Govt., Banks and other institutions.

Advertising and Brand management (BVRM-310)
CO1 : To help students to understand the concept of marketing and its applications.
CO2 : To expose the students to the latest trends in marketing and advertising.
CO3 : To monitor and solve service problems and to promote continuous improvement in service , to maximise sales of goods & services
CO4 : To provide specialist support to customers facilitating purchases of various brands and reliable service

Fundamentals of Visual Merchandising (VM) (BVRM-311)

CO1 : Understanding the role and importance of merchandise display in attracting customers
CO2 : Explain assembling of products before display, Know about safe transfer of merchandise to display area
CO3 : Learn to review product condition, Explain cleanliness of display area, accessories and equipment, Elaborate estimation of quantity for products to be displayed
CO4 : Analyse concepts related to elements of display, Learn about potential places for product display , Illustrate how you manage colour and space to display.

Comprehensive Viva-Voce (BVRM-312)

CO1 : To ensure that candidate is able to understand the theoretical aspects as well as practical aspects of retail operations.
CO2 : To ensure that students has proper communication skills , and presentation skills.

7. FACULTY PROFILE

Retail Management

1. Dr. K.L. Kaushik (Nodal Officer)
2. Dr. Manoj Shukla (Coordinator)
3. Poonam Rautela (Asstt. Professor)
4. Ritu Mudgal (Asstt. Professor)
5. Dr. Naresh Kamra (Asso. Professor)
6. Dr. Dimple (Asstt. Professor)
7. Lovekesh (Asstt. Professor)
8. Mr. Lokesh Aggarwal (Guest Faculty)
9. Dr. Sachin Garg (Asstt. Professor)
10. Mr. Vineet Nagpal (Asstt. Professor)
11. Jayanti (Asstt. Professor)

Software Development

1. Dr. K.L. Kaushik (Nodal Officer)
2. Dr. Sachin Garg (Coordinator)
3. Ms.Vandana Srivastava (Asstt. Professor)
4. Mr. Lovkesh (Asstt. Professor)
5. Ms. Meenakshi(Asstt. Professor)
6. Mitinder Aadhan (Asstt. Professor)
7. Shilpa Goyal (Asstt. Professor)
8. Rashmi Goyal (Asstt. Professor)

8. Details of ICT Facilities & Learning Resources

8.1 Computer Labs

We boast of 12 computer labs with latest technology including I , Thin clients, Internet and Multimedia environment. Different types of softwares are also available in the Labs. Programming languages include Oracle, .NET, PHP, C, C++, Java, Server 2008-2012, MS-Office 2013, Visual Fox Pro, linux/Unix.

Computer labs are fully air-conditioned, highly spacious and provide a rich environment for healthy interaction between teachers and students. The college has its own Leased line connection which provides 24 hour internet access to the students. In addition to it, the college has 635 computers with latest configurations.

8.2 Retail Lab

The Retail Lab was inaugurated in the college on 9th March 2016 for the students of UGC-sponsored Course of B.Voc. (Retail Management). The Lab is furnished with all the basic features of a retail store like POS, shelves, counters, billing software, camera surveillance etc

8.3 Smart Class Rooms (Configuration)

CPU	I3 2ND TO 4TH GENERATION
RAM	4GB
DDR3 HARDDISK	500GB/1TB
PROJECTOR	BENQ/ACER 48"W x 48"H
INPUT MODE	TOUCH MOUSE /KEYBOARD
VISUALIZER	YES
USB PORTS	YES
INTERNET	BLUETOOTH/LAN
SPEAKER	YES

8.4 Auditorium

For organizing conferences, carnivals and large-scale congregations within the campus, the college has a well-planned air-conditioned seminar hall in the college building that can accommodate over 200 people and a huge Indoor Auditorium that can accommodate over 400 people.

8.5 English Language Lab

A language lab functions in the college for developing and enhancing the communication skills (reading, writing, listening and speaking), vital for the present job market of the students. This is done by an able and motivated faculty using audio and video aids, conducting role plays, mimes, debates, group discussions etc. The element of personality development is in-built in the very structure of the course. A Certificate by the College is awarded to the successful candidates. The college charges very nominal fee for meeting the maintenance expenses.

8.6 E-Resources and E-Journals

Our Library has rich Electronic Database having 175 e-books, 150 Journals and N-List e-journal.

9. REPORT OF COURSE COMPLETION
9.1   COURSE COMPLETION (S.D)

YEAR	ENROLLED	CERTIFICATES	DIPLOMA	ADVANCE DIPLOMA	No. Of Placements
2014-15	37	11	14	-	-
2015-16	40	34	24	8	-
2016-17	42	31	21	35	11
2017-18	33	11	16	13	10
TOTAL	152	87	75	56	21

9.2 COURSE COMPLETION (RM)

YEAR	ENROLLED	CERTIFICATES	DIPLOMA	ADVANCE DIPLOMA	No. Of Placements
2015-16	31	31	5	-	-
2016-17	22	16	28	24	-
2017-18	21	19	12	5	15
TOTAL	74	66	45	29	15

10. **PLACEMENT STATUS**

   10.1   Retail Management

Sr. No.	Roll No.	Student Name	Presently working at
1.	7	Kalpana	SRS CINEMAS, Sector 12, FBD
2.	8	Neelam	SRS CINEMAS, Sector 12, FBD
3.	31	Aakriti	Hairs cosmetic/consultant, Crown Interiorz, FBD
4.	1	Chanda	S.S Traders Pvt Ltd.
5.	6	Deeksha	Easy day (future group)
6.	27	Anamika	Easy day (future group)
7.	9	Sonam	Beauty Consultant, Self Parlour (Soni Makeover) at Ballabgarh
8.	14	Nisha	Executive at DOTFLICK INSTITUTE
9.	16	Priya	Teaching at Private school at ballabgarh
10.	17	Jyoti	Dominos at CTC Mall, Faridabad
11.	18	Sonika	Teaching at Primary School, Rajasthan
12.	21	Laxmi	Policy Bazar, Gurugram
13.	19	Meenu	FDRA Labs India Pvt Ltd. (Market place executive))
14.	26	Mamta	Team Leader at Future Group
15.	30	Kajal	Sonax Perfect Finish Pvt Ltd. (Telecaller)

10.2   Software Development

Sr. No.	Roll No.	Student Name	Presently working at	Designation
1.	10	Harshit Srivastava	Sapient Consulting Private Limited	Java Developer

2.	6	Ashima	Acidaes Solution Private Limited	Software Testing
3.	2	Shivam	Softonic World Pvt. Ltd	Web Designer
4.	1	Imran	Softonic World Pvt. Ltd.	Web designer
5.	4	Karan	Dotflick Computers	Faculty
6.	25	Tayyab	Whizz Trip Pvt. Ltd.	Data Operator
7.	23	Ankit Garg	Rawal Academy	Executive
8.	8	Nitin	Shivalik Printers Pvt. Ltd.	H/W Executive
9.	25	Dinesh	Food Panda	Chat process executive
10.	4	Lata	Dev wines Corporation	Data Operator
11.	33	Meenakshi	Bajaj Capital	Tele caller
12.	38	Shalini	Dev wines Corporation	Data operator
13.	39	Bhawana	Dev wines Corporation	Data operator
14.	28	shubham	Dev wines Corporation	Data operator
15.	36	Himani	Aggarwal college	Computer operator
16.	13	Nishant	Web Apps software solutions	Web Developer
17.	2	Rajneesh	A.V.Global Corporation Pvt. Ltd	Export/Import documentation(Custom Clearance)
18.	19	Mohit Mehra	Dev wines Corporation	Data operator
19.	9	Dolly Aggarwal	Tech Mahindra	Tech Support
20.	34	Manoj	JCB India Ltd.	Executive

11. INDUSTRY COLLABORATIONS
- MOU with Infrastructure Leasing and Financial Services Ltd. (For B.Voc Retail Management)
- MOU with NIIT (For B.Voc Software Development)
- MOU with Edubridge Pvt. Ltd.

12. RESULTS

Title of the Programme	Total no. of students appeared	Pass	Division				
			Distinction %	I %	II %	III %	Pass %
B.VOC(SD)	34	32	19	13	0	0	94.12
B.VOC(RM)	30	29	0	27	2	0	96.67

12.1 NO. OF UNIVERSITY MERIT POSITIONS

Academic Year	B.Voc RM	B.Voc SD
2014-15	NA	7
2015-16	7	12
2016-17	14	12
2017-18	41	32

13. Guest Lectures Organized (RM)

Academic Year	B.Voc RM	B.Voc SD
2015-16	6	4
2016-17	30	29
2017-18	30	6

14. Industrial Visits, Field Trips Organized

Academic Year	No. of Visits (RM)	No. of Visits (RM)
2015-16	3	1
2016-17	3	1
2017-18	4	3
Total	10	5

16. Activities Organized By Department

- Industry Visits

Industrial Visit Software Development Students 2017 ANR Software Solution Pvt. Ltd.

- Educational trips

Birla Mandir Jaipur 2016

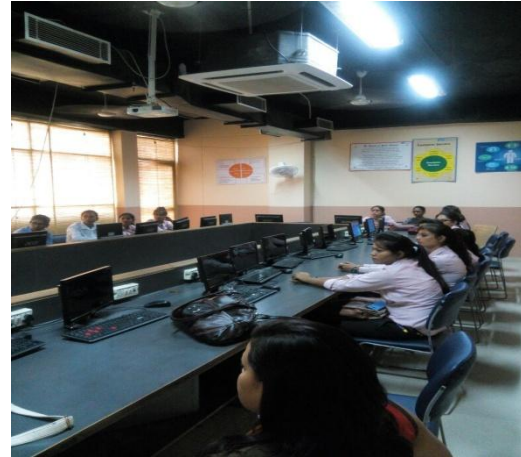GIP Mall Noida 2017

- Power point presentation competition

Powerpoint Presentation Competition 2016

- Guest lecture

Guest Lecture for Software Development 2017

• Training Classes for Communication and Interviewing Skills at Gurugram

Infocity Gurugram 2018

• Visits to Malls

Visit to Silver Palm Mall (Jaipur) 2016   World Trade Park Mall Jaipur

• Mini Bazaar

Mini Bazaar 2016   Mini Bazaar 2016

- Job Fair

Job Fair at Aggarwal College Campus

- Summer Training

Summer Training 2017 (SRS Value Bazaar)   Summer Training 2017 (SRS Cinemas)

17. Lab Infrastructure

A) Software Development

Software Lab

B) Retail Management

Retail Lab   Retail Lab

18. Number of Summer Training Projects done by students based on industrial Trainings

Year	2017-18
Retail Management	30
Software Development	35
Total	65

19. Innovative Quality Initiatives by the department
- Curriculum is designed and revised in consultation with industrial experts, by keeping in view of changing needs of industry and trained manpower.
- Department to offer most time relevant syllabus thorough regular inputs and feedback from stakeholders (Mainly Industry).
- Exhaustive open lab practice and hands on session.
- Mentoring system is adopted since inception of the department.
- On the job training is a mandatory part of curriculum.

21. Other Certificate/Diploma/Advance Diploma Courses

1. Computer Education
2. Software Development
3. Retail Management
4. Personal Computing And Digital Lifestyle
5. Advance Business Analysis Tools And Techniques
6. Computerized Financial Accounting Using Tally Erp 9,Level 1
7. Computerized Financial Accounting Using Tally Erp 9,Level 2
8. Corporate Finance And Management Accounting
9. Capstone Project Using Tally Erp 9
10. Computer Overview And Programming Structure And Methodology
11. Working With Ms Office 2013
12. Logic Building And Effective Problem Solving
13. Information Systems And Common Business Processes
14. Java 7
15. Professional Skills
16. Capstone Project Using Tally Erp 9 With Gst And Implementation Of Tds Transactions
17. French
18. Ms Office
19. Digital Marketing
20. Cyber Security
21. Life With Specialization In Human Values & Ethics
22. Life With Specialization In Women Empowerment
23. Life With Specialization In Gender Sensitization
24. Life With Specialization In Gender Equality
25. Honing The Millenial - Next Gen
26. Physical Fitness, Empowerment And Development Of Self Defence Skills
27. Tally With Gst
28. Abacus Trainer Training Program (Att)
29. Vedic Maths Trainer Training Program (Vtt)
30. Industry Recognized Personality Development Program & Spoken English Program (IRPDP-Sep)

Diploma Courses
1. Computer Education
2. Software Development
3. Retail Management
4. Financial Accounting
5. Computer Applications

Advanced Diploma Courses
1. Computer Education
2. Software Development
3. Retail Management

22. Upcoming Programmes

The College is going to introduce new B.Voc/Certificate Courses from the session 2019-20.

A) B.Voc (Degree Program)

Name of the Program	Duration
B.Voc Hospitality Management	3 Years(With Multiple entry and exit Points)
B.Voc Tourism Management	3 Years(With Multiple entry and exit Points)

B) Certificate Courses

Name of the Program	Duration
Mobile Repairing	6 Months
Front Office Operations	6 Months
Good and service Tax Accounts	6 Months
Beauty and wellness	6 Months
Waste Management	6 Months
LED Light Repairing	6 Months
Tally with GST	6 Months

22. Group Photo Graph

Principal Dr. Krishan Kant with Students of B.Voc (R.M).