

# MESSAGE FROM CHAIRMAN

At Metahorizon College, we stand at a pivotal point in our commitment to delivering future-ready education. It is with great pride that I share our continued strides in equipping students with the knowledge, skills, and mindset required to thrive in an ever-evolving global landscape.



Our close collaboration with industry and extensive practical experience have been instrumental in shaping a forward-thinking academic environment—one that bridges rigorous theoretical foundations with real-world application. Early engagement, hands-on learning, and continuous innovation are cornerstones of our educational philosophy. In line with this vision, we are proud to offer the Bachelor of Science in Computer Information Systems and Technology (BS CIST)—a dynamic program that integrates academic excellence with industry-recognized certifications and experiential training. Our faculty of seasoned professionals ensures that students are not only prepared for today's challenges but are also empowered to lead tomorrow's transformations.

Beyond academics, Metahorizon is dedicated to fostering a community rooted in integrity, innovation, and leadership. We aim to serve not just our students, but the broader society—building individuals who lead with purpose and make meaningful contributions at every level.

We invite you to be a part of this journey—where education meets vision, and potential turns into progress.

Badri Bahadur Karki Chairman

(Former Auditor General)

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#### BBA

#### Bachelor of Business Administration

The Bachelor of Business Administration (BBA) program at Metahorizon College's designed to prepare students for the dynamic and ever-evolving world of business. Our comprehensive curriculum combines theoretical knowledge with practical skills, ensuring that graduates are well-equipped to meet the demands of the global marketplace.





- Eligibility: Applicants must have completed their higher secondary education (10+2) or equivalent from a recognized board.
- Selection Process: Admission is based on academic performance, entrance examination scores, and a personal interview.

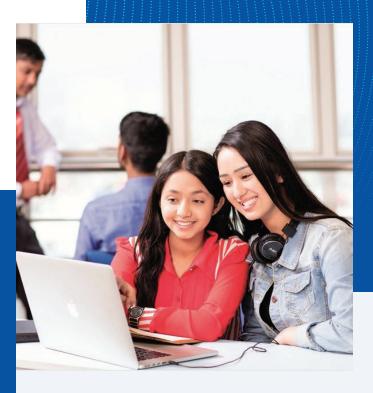
#### **KEY FEATURES**

- Holistic Curriculum: Our BBA program covers a wide range of subjects, including management principles, marketing, finance, accounting, economics, and business law.
- Experienced Faculty: Learn from a team of highly qualified and experienced faculty members who bring real-world insights into the classroom.
- Practical Exposure: Gain hands-on experience through internships, workshops, seminars, and industry visits.
- State-of-the-Art Facilities: Study in a modern campus equipped with advanced learning resources, including a well-stocked library and computer labs.
- Networking Opportunities: Connect with industry professionals, alumni, and peers through various networking events and activities.
- Career Support: Benefit from dedicated career services that include resume building, interview preparation, and job placement assistance.

## Program Objectives

The main objective of the BBA Program is to prepare students to become competent, skilled, confident and socially responsive professionals who can effectively support managerial, entrepreneurial and leadership roles in business and social organizations in today's competitive environment. More specifically the program aims to:

- Develop a habit of critical thinking in students,
- Develop analytical and problem solving abilities in students,
- Improve communicative and presentation skills of students,
- Familiarize students with contemporary concepts, tools and techniques of management,
- Deepen the knowledge and sharpen the expertise of students in a given functional area and
- Prepare students as sensible and responsive citizens with a high degree of professional, social and ethical values.
- Prepare students to proceed onto post graduatelevel study in business administration.



## **Key Featuresof the BBA Program**

- It is a four-year, 120 credit hours bachelor degree program in management in line with the international standards of bachelor degree programs in business and management.
- ✓ It emphasizes the importance of concentration/specialization on functional areas to enable BBA graduates face effectively and efficiently the complexities of a particular functional area.
- ✓ It offers a wide range of concentration courses to match student's individual interests with the demand for employment market. With proper academic and course planning, students can take advantages of specialization.
- It provides students with an opportunity for learning, gaining exposure and networking through its internship program.

## EXPECTED OUTPUT

After successful completion of the four-year program, a BBA graduate is expected to be one or all of the followings:

- A suitable candidate with a sound academic background, competence, confidence, skills, attitude and motivation for further study in the area of management.
- An entrepreneur who can start-up a business and manage it in today's competitive business environment and
- A professional who will be able to successfully work at an entry level in corporate houses and other social organization with required knowledge, competence, confidence, skills and responsibility.



#### Specifically, a BBA graduatewill be equippedwith:

- Knowledge and understanding of contemporary concepts, tools and techniques of management.
- Knowledge of the broader environment in which she/he lives and works and the very dynamic interactions between the individual, organization and the world.
- Critical and creative thinking and sound analytical and problem-solving abilities.
- Inter-personal and team-building skills essential for personal, professional and social life.

- Sound, relevant and latest IT skills which enhances individual and organization productivity and
- An appropriate mix of competence, confidence, skills, ambition, motivation, responsibility, accountability and high standard of professional and ethical values which significantly contribute for further growth in her/his study and career.



## POTENTIAL INTAKES ELIGIBILITY

The BBA program aims to attract and serve the needs of candidates who are competent and motivated to excel in their study and career. Specifically, potential intakes for the BBA program are those who have successfully completed 10+2 or any other equivalent degree in any discipline with aggregate of 40 to 49 percent of total marks or an equivalent CGPA (at least 'C' grade in each subject and at least 2.0 CGPA).

#### CREDIT TRANSFER

The BBA program accepts the credit transfer of the students studying similar program in other college/university only by getting the prior written approval from the Dean's office at Metahorizon College, Faculty of Management. The maximum credit that can be transferred is 30 percent of the total credit load necessary for the BBA program. For the credit transfer, a student must receive at least C+(50 to below 59 percent) in respective courses. Courses taken earlier than five years from the time of transfer may not be accepted for the credit transfer.

#### **ADMISSION PROCEDURE**

Student must qualify the entrance test held by the University. The students will be admitted on merit basis.

#### **STUDENT EVALUATION**

The student's academic performance during a semester will be evaluated internally (session work) and externally (the final examination).

#### **ATTENDANCE REQUIREMENT**

The attendance requirement shall be a minimum of 75% of the classes in any particular subject.

## EXAMINATION PATTERNFOR THEORY AND PRACTICAL

University Exam : 60% Internal assessment : 20% Assignments/practical: 20%

Candidate has to pass separately in Theory and Practical by scoring a minimum of 40% marks (equivalent grade) in the aggregate marks obtained in internal assessment, assignments/lab works/ practical and final University examination.

#### COURSE ADMISSION AND REGISTRATION

Admission for courses is done at the beginning of each semester. The academic record of a student is maintained in terms of the grade for each course.

Student will be registered once in the university during his courseduration for which he/she shall have to apply for as per the rule of university.

#### FINAL EXAMINATION

At the end of semester, final examination will be conducted by the university, according to the examination rules of the university.





#### **BBA CURRICULAR STRUCTURE**

#### **SEMESTER-I**

#### **SEMESTER-II**

Code	Subject	Credit Hrs.
MENG-101	English	3
MMTH-108	Business Mathematics	3
MECO-127	Micro Economics	3
MACC-143	Financial Accounting-I	3
MMGT-151	Principle of Management	3
	Total Credit Hrs.	15

Code	Subject	Credit Hrs.
MACC-144	Financial Accounting-II	3
MECO-128	Macro Economics	3
MITC-134	Introduction to Computer	3
MMKT-182	Principle of Marketing	3
MSTT-114	Business Statistics	3
	Total Credit Hrs.	15

#### **SEMESTER-III**

#### **SEMESTER-IV**

Code	Subject	Cr. Hrs.
MACC-245	Cost & Management Accour	nt 3
MENG-202	Business Communication	3
MITC-235	Data Base Managements	3
MFIN-263	Business Finance	3
MMKT-283	Marketing Management	3
	Total Credit Hrs.	15

Code	Subject	Credit Hrs.
MSTT-215	Quantitative Techniques	3
MMGT-272	Business Law	3
MMGT-273	Business Env. in Nepal	3
MFIN-264	Financial Management	3
MMGT-252	HR Management (HRM)	3
	Total Credit Hrs.	15

#### **BBA CURRICULAR STRUCTURE**

#### **SEMESTER-V**

#### **SEMESTER-VI**

Code	Subject	Credit Hrs.
MRCH-321	Research Methodology	3
MMGT-305	Project Management	3
MMGT-303	Prod. & Operation Mgmt.	3
MMGT-308	Entrepreneurship Devt.	3
MITC-336	Mgmt. Information Sys.(M	S) 3
	Total Credit Hrs.	15

Code	Subject	Credit Hrs.
MFIN-365	Banking and Insurance	3
MMGT-312	Biz. Ethics &Social Resp.	3
MACC-346	Taxation and Auditing	3
MITC-337	E-Commerce	3
MMGT-351	Organizational Behavior	3
	Total Credit Hrs.	15

#### **SEMESTER-VII**

#### **SEMESTER-VIII**

Code	Subject	Cr. Hrs.
MMGT-457	International Business	3
MMGT-456	Co-operative Management	3
	Specialization-I	3
	Specialization-II	3
MMGT-413	Internship	3
	Total Credit Hrs.	15

Code	Subject	Credit Hrs.
MMGT-304	Tourism Management	3
MMGT-409	Strategic Management	3
	Specialization-III	3
	Specialization-IV	3
	Specialization-V	3
	Total Credit Hrs.	15



## Bachelor in Computer Application

Bachelor in Computer Application (BCA) is an undergraduate degree course in computer applications. It a is four years (8 semesters) program. With the swift growth of IT industryin Nepal, the demand of computer professional is increasing day by day. This increasing growth of IT industry has created a lot of opportunities for the computer graduates.



#### **COURSE OBJECTIVE**

The program prepares students with competent skill-sets and comprehensive knowledge of diverse verticals in the Computer Application field and helps them to take up different technical responsibilities in the industry.

The program covers comprehensive technical knowledge, in demand by various industry domain and in the fields of software Programmer, System and Network Administrator, Web Designer, Faculty for Computer Science /Communication Technology, etc.



+2, Intermediate, PCL or equivalent level with minimum of 40% marks or aggregate C grade(at least 1.61 GPA) from any stream shall be eligible to join the BCA course on the basis of marks obtained in entrance.



**PURPOSE** 

#### **FUTURE SCOPE**

After the completion of BCA, studentswill have the option of becoming computeroperator to data entry operator to the system administrator. They can seek jobs both in public and private sectors, and insurance, accounting, stock markets, e-commerce and marketing.

If one does not want to do job after BCA, then he/she may go for the higher studies MCA, MBA, Etc.
Rather he/she can peruse special courses like Masters in Animation, Master's Degree in Information Management (MIM), Masters in Computer Management (MCM) etc.

- To demonstrate the ability to adapt technological changes and innovations in the discipline. To analyze, design, implement and evaluate computerized solutions to real life problems using appropriate computing method.
- To develop computer programs using functional programming and object-oriented programming paradigms.
- To apply techniques of software validation and reliability analysis to the development of computer programs.
- To demonstrate critical thinking and develop communication skills
- To acquire the knowledge, skills, experience and values to become life long learners and be able to get employment in the computer-related field or go for the further study.

#### Curriculum Structure

#### First Year/First Semester

Course Code	Course Title	Credit Hours
HCAC-101	Computer Fundamental and Office Automation	3
HENG-102	Foundation course in computing English-I	3
HMTH-103	Math-I	3
HCAC-104	Programming in C	3
HCAC-105	Digital Logic	3
	Total Credit Hours	15

#### First Year/Second Semester

Course Code	Course Title	Credit Hours
HCASO-151	The art of social engagement and Technology	3
HENG-152	Technical English	3
HMTH-153	Math-II	3
HCAC-154	C++ programming	4
HCAC-155	Operating System	3
	Total Credit Hours	16

#### **Second Year / Third Semester**

Course Code	Course Title	Credit Hours
HCAC-201	Financial Accounting	3
HCAC-202	Data Structures & Algorithm	3
HCAC-203	Microprocessor & Assembly Language	3
HCAC-204	Computer Oriented Numerical Methods	3
HCAC-205	Data communication and Computer Networking	3
	Total Credit Hours	15

#### **Second Year/ Fourth Semester**

Course Code	Course Title	Credit Hours
HCAC-251	Java programming	3
HCAC-252	Database Management System	3
HCAC-253	Computer Architecture	3
HCAC-254	System Analysis and Design	3
HCAC-255	Discrete Structure	3
HCAC-256	Project -I	2
	Total Credit Hours	17

#### Third year / Fifth Semester

Course Code	Course Title	Credit Hours
HCAC-301	e- Governance	3
HCAC-302	Web Designing	
HCAC-303	Applied Economics	3
HCAC-304	Probability & Statistics	3
HCAC-305	Net Technology	3
	Total Credit Hours	15

#### Third Year / Sixth Semester

Course Code	Course Title	Credit Hours
HCAC-351	MIS and e-commerce	3
HCAC-352	Cyber law and computer Ethics	3
HCAC-353	Software Engineering	
HCAC-354	Advance Java programming	
HCAC-355	Computer Graphic	
HCAC-356	Project- II	
	Total Credit Hours	17



#### Curriculum Structure

#### Fourth Year/Seven Semester

Course Code	Course Title	Credit Hours
HCAC-401	PROGRAMMING IN PYTHON	3
HCAOR-402	Operational Research	3
HCANP-403		3
HCAIN-404	Internships	3
	Elective -I	3
	Elective -II	3
	Total Credit Hours	18

#### **Elective subjects:**

Course Code	Course Title	Credit Hours
HCAC-471	Cloud Computing	
HCAMT-472	ERP	
HCAC-473	Artificial Intelligence	
HCAC-474	GIS	
HCAC-475	Data Warehousing and Data Mining	
	Total Credit Hours	

#### Fourth Year/Eight Semester

Course Code	Course Title	Credit Hours
HCAC-451	Mobile programming	3
HCAPJ-452	Project - III	6
	Elective-III	3
	Elective -IV	3
	Total Credit Hours	15

#### **Elective Subjects:**

Course Code	Course Title	Credit Hours
HCAC-481	Database Administration	
HCAC-482	Network management and Administration	
HCAC-483	Linux Shell Programming	
HCAC-484	Distributed System	
HCAC-485	Advance .Net Technology	
HCAC-486	Big data	
	Total Credit Hours	

## Bachelor of Science in Computer Science and Information Technology

(BSc.CSIT)

The Bachelor of Science in Computer Science and Information Technology at Metahorizon College offers a comprehensive curriculum designed to equip students with fundamental knowledge and practical skills in the everevolving field of computing. This program prepares graduates for a diverse range of careers in technology, from software development to data analysis, and provides a solid foundation for advanced studies in computer science.

#### **PROGRAM HIGHLIGHTS:**

- Innovative Curriculum: Our program covers
   essential topics including programming, database
   management, network systems, and cybersecurity.
   Courses are designed to provide both theoretical
   knowledge and hands-on experience.
- State-of-the-Art Facilities: Students benefit from access to modern laboratories and technology resources, enhancing their learning and practical skills.
- Experienced Faculty: Learn from a team of skilled professionals and academics with extensive industry experience and academic expertise.
- Career Opportunities: Graduates are well-prepared for roles in software development, IT consultancy, system analysis, and more, with many opportunities for internships and industry connections.



# BSC.CSIT SPECIAL HIGHLIGHTS

- Al & Machine Learning: Machine Learning, NLP, Data Mining
- App & Web Development: Mobile App Development, Advanced Web Programming, .NET
- Cybersecurity & Networks: Cryptography, Wireless Networking
- Software Engineering: Software Architecture, Software Testing
- Research / Higher Studies: Simulation & Modeling, Compiler Design, Distributed Computing.

### Admission Requirements:

- Eligibility: Completion of higher secondary education (10+2) with a focus on science subjects.
- Application Process: Submit the completed application form along with the required documents and meet the admission criteria set by the university.

#### Roles and Carrier of BSc.CSIT

Graduates of BSc.CSIT can pursue a variety of roles, such as:

- Software Developer / Programmer
- Web Developer / Web Designer
- Mobile App Developer (Android/iOS)
- Database Administrator
- System Analyst
- Network Administrator
- Cybersecurity Analyst
- IT Officer in Banks, Corporations, Government Agencies
- Technical Support Engineer
- DevOps Engineer / Cloud Associate
- QA Engineer (Software Testing)

#### COURSE STRUCTURE

	SEMESTER I				
Course Code	Course Title	Credit Hours	Internal Marks	External Marks	Total Marks
CSMT 101	Mathematics-I	3	40	60	100
CSMT 102	Physics	3	40	60	100
CSMT 103	Technical Communication English	3	40	60	100
CSMT 104	Computer Concept and Programming	3	40	60	100
CSMT 105	Digital Logic	3	40	60	100

	SEMESTER II				
Course Code	Course Title	Credit Hours	Internal Marks	External Marks	Total Marks
CSMT201	Mathematics-II	3	40	60	100
CSMT202	Object Oriented Programming in C++	3	40	60	100
CSMT203	Discrete Structure	3	40	60	100
CSMT204	Statistics-I	3	40	60	100
CSMT205	Microprocessor and Microcontroller	3	40	60	100

	SEMESTER III					
Course Code	Course Title	Credit Hours	Internal Marks	External Marks	Total Marks	
CSIT 301	Computer Organization and Architecture	3	40	60	100	
CSIT 302	Data Structures and Algorithms	3	40	60	100	
CSIT 303	Numerical Methods	3	40	60	100	
CSIT 304	Statistics-II	3	40	60	100	
CSIT 305	Database Management Systems	3	40	60	100	

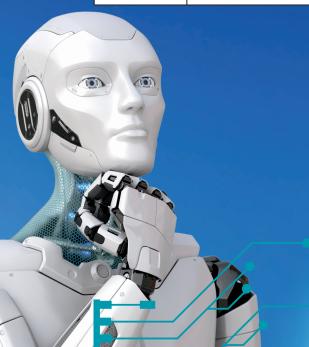
	SEMESTER IV						
Course Code	Course Title	Credit Hours	Internal Marks	External Marks	Total Marks		
CSIT 401	Computer Graphics	3	40	60	100		
CSIT 402	Operating Systems	3	40	60	100		
CSIT 403	System analysis and Design	3	40	60	100		
CSIT 404	Java Programming	3	40	60	100		
CSIT 405	Web Technology	3	40	60	100		

#### COURSE STRUCTURE

	SEMESTER V				
Course Code	Course Title	Credit Hours	Internal Marks	External Marks	Total Marks
CSIT 501	Programming in Python	3	40	60	100
CSIT 502	Theory of computation	3	40	60	100
CSIT 503	Computer Network	3	40	60	100
CSIT 504	Analysis and Design of Algorithm	3	40	60	100
	Elective-I	3	40	60	100
CSIT 510	Project-I	3	80	20	100

LIST OF ELECTIVES			
Course Code Course Title			
CSIT 505	Image Processing		
CSIT 506	Data Analytics and Visualization		
CSIT 507	Multimedia System		
CSIT 508	Operations Research		
CSIT 508	E-Commerce		

SEMESTER VI					
Course Code	Course Title	Credit Hours	Internal Marks	External Marks	Total Marks
CSIT 601	Software Engineering	3	40	60	100
CSIT 602	Cryptography and Network Security	3	40	60	100
CSIT 603	Artificial Intelligence	3	40	60	100
CSIT 604	Simulation and Modelling	3	40	60	100
CSIT 605	Research Methodology	3	40	60	100
	Elective-II	3	40	60	100



LIST OF ELECTIVES			
Course Code	Course Title		
CSIT 606	Mobile Application Development		
CSIT 607	Wireless Communication and Networking		
CSIT 608	Unix Shell Programming		
CSIT 609	E-Governance		
CSIT 610	.Net Technology		

#### COURSE STRUCTURE

SEMESTER VII					
Course Code	Course Title	Credit Hours	Internal Marks	External Marks	Total Marks
CSIT 701	Compiler Design and Construction	3	40	60	100
CSIT 702	Distributed and Cloud Computing	3	40	60	100
CSIT 703	Data warehousing and Data Mining	3	40	60	100
CSIT 704	Machine Learning	3	40	60	100
	Elective-III	3	40	60	100
CSIT 711	Project-II	6	160	40	200
CSIT 712	Constitution of Nepal and Eastern Philosophy*	Non Cr.			

#### \*Non-Credit But Compulsory

LIST OF ELECTIVES			
Course Code	Course Title		
CSIT 706	Software Project Management		
CSIT 707	Software Architecture and Design Pattern		
CSIT 708	Management Information System		
CSIT 709	Neural Network		
CSIT 710	Embedded System		

SEMESTER VIII					
Course Code	Course Title	Credit Hours	Internal Marks	External Marks	Total Marks
CSIT 801	Professional and Social Ethics in IT	3	40	60	100
CSIT 802	Management and Entrepreneurship in IT Industry	3	40	60	100
	Elective-IV	3	40	60	100
CSIT 808	Internship	6	120	80	200
CSIT 809	Research Seminar	2	50	0	50

NOTE: For Elective Subjects, from the enrolled students, minimum 50% students should be interested and subject can be applied to the facility available in the campus.

LIST OF ELECTIVES			
Course Code	Course Title		
CSIT 803	Internet of Things (IoT)		
CSIT 804	Natural Language Processing		
CSIT 805	Software Quality Assurance		
CSIT 806	Geographical Information System		
CSIT 807	Introduction to Quantum Computing		

#### NOTE:

- 3 credit hours courses with theory and labs is equivalent to 3 lecture hours and 3 lab hours = 6 working hours per week.
- 3 credit hours theory-only course is equivalent 3 lecture hours and 2 tutorial hours = 5 working hours per week.

#### **EVENTS ACTIVITY**

















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#### **Subarna Karki**

Managing Director (CEO Metahorizon Inc. USA) http://metahorizon.com/



## Get In Touch With Us



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