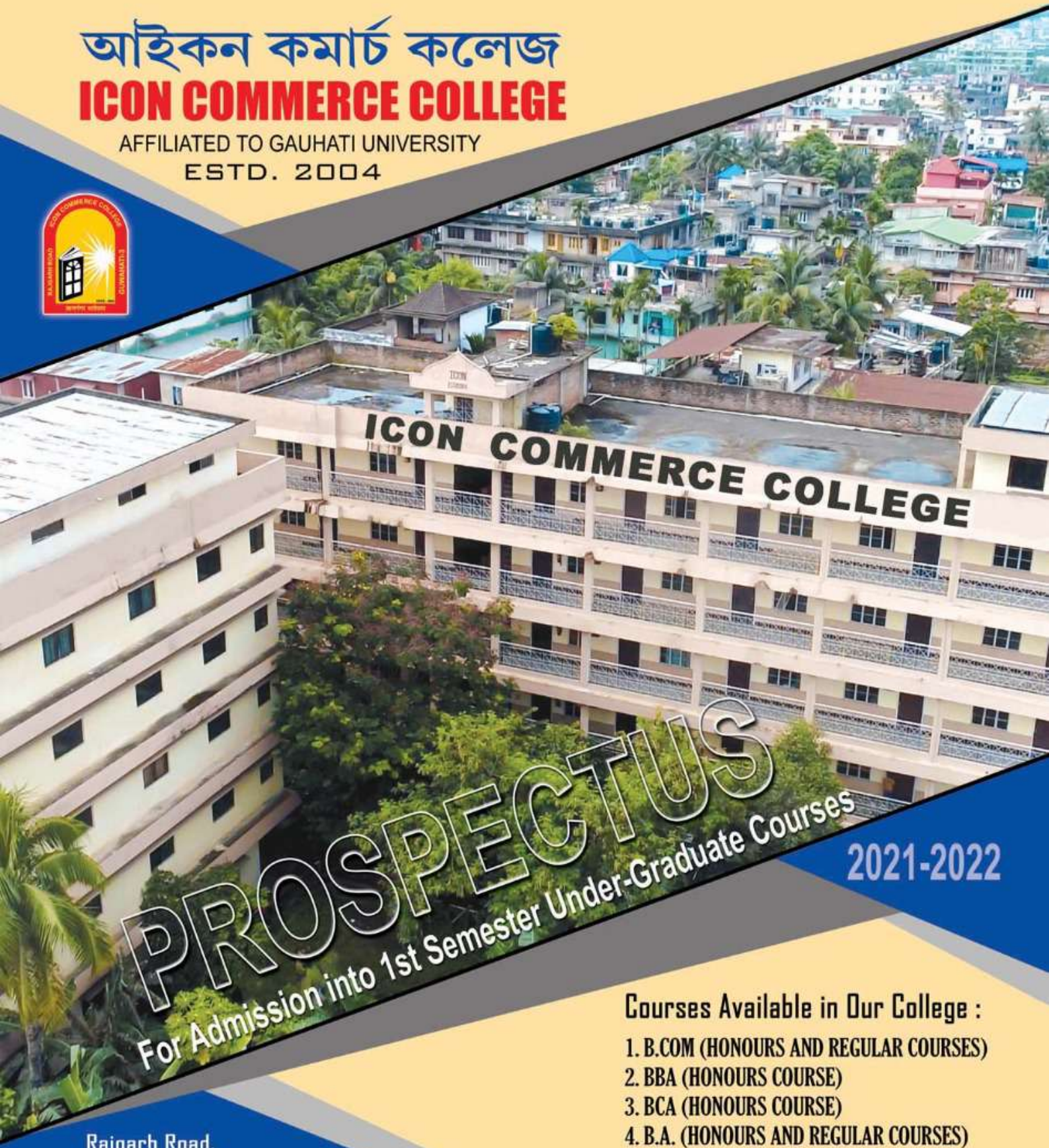
আইকন কমার্চ কলেজ

ICON COMMERCE COLLEGE

AFFILIATED TO GAUHATI UNIVERSITY

ESTD. 2004



PROSPECTUS

For Admission into 1st Semester Under-Graduate Courses

2021-2022

Courses Available in Our College :

1. B.COM (HONOURS AND REGULAR COURSES)
2. BBA (HONOURS COURSE)
3. BCA (HONOURS COURSE)
4. B.A. (HONOURS AND REGULAR COURSES)
5. B.SC (HONOURS AND REGULAR COURSES)
6. M.COM

Rajgarh Road,
Near Byelane No. 3,
Guwahati-781003, Assam
EMAIL ID : iconcom.2004@gmail.com
WEBSITE : www.iconcommercecollege.in
CONTACT NO. : +91-9365375782, +91-9365383289

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ICON COMMERCE COLLEGE

AFFILIATED TO GAUHATI UNIVERSITY

ESTD. 2004

PROSPECTUS

2021 – 2022

For Admission into B.Sc. 1st Semester

Courses Available in Our College:

1. **B.SC (HONOURS AND REGULAR COURSES)**
2. **B.COM (HONOURS AND REGULAR COURSES)**
3. **BBA (HONOURS COURSE)**
4. **BCA (HONOURS COURSE)**
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6. **M.COM**

RAJGARH ROAD, NEAR BYELANE NO: 3, GUWAHATI – 781003, ASSAM
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COLLEGE PROFILE

ICON Commerce College, situated at Rajgarh Road, Chandmari, Guwahati-781003, is one of the most promising educational institution in the state of Assam as well as India, imparting Commerce (B.Com), Management (BBA), Computer Application (BCA), Science (B.Sc.) and Arts (BA) at Under Graduate level and Commerce (M.Com) at Post Graduate levels. The college was established **in the year 2004**. The College is affiliated to Gauhati University and it is a Gauhati University permitted Examination centre. The College follows all rules and regulations of Gauhati University. The College provides Study Materials to its students, which are prepared by our learned and experienced faculty members. The College Library is rich in its collection of books and journals which are available for the students and faculty members. The College organises Seminars and Workshops which help both the students and the faculty members to boost up their academic ability. The College also organizes periodic discussions on emerging topics like, General Budget, Rail Budget etc. where the students and the faculty members are engaged in group discussions where they share their views.

The College organizes Annual College Week where indoor games, outdoor games, quiz and debating competitions, art and literature competitions and various other events are held to promote the latent skills and talent of the students of this College.

Classroom teaching is supplemented by interactive sessions with the students. Use of Power Point Presentation is another important feature of classroom teaching where the students in the classes are also involved. The College has a well equipped Computer Lab to impart Computer education to its students and also many of the class rooms are equipped with projectors and computers for smart classes. Apart from class room teaching, Online Classes are also organised for the students through Google meet and also WhatsApp groups are created where students interact with their subject teachers to clear out their doubts related to their academic syllabus.

Students by and large who are admitted in our College maintain the sequence of gradual improvement over their earlier examinations. A large group of the students is of average merit at the entry level. During their tenure of study in this College, most of them are found in on improvement spree and the result of their final examination shows many of them secure remarkable higher grades.

The College has a team of learned and experienced faculty members who impart quality education to the students and help the students in their all round development. All of our faculty members are experienced and are capable of handling academic matters in their respective style, maintaining the desired standards. Nearly one-third of our faculty members are involved in research works and are perusing Ph.D. Course. Among the faculty members most of them are Ph.D., M.Phil.,

NET and SLET qualified. Our faculty members, as on today are found engaged in equipping themselves with latest academic inputs and a person in teaching profession needs to synergize between acquiring knowledge on one hand and transmission of knowledge to the students on the other. This sustained endeavour on the part of our faculty members helps in building a good rapport with the students which is the need of the hour. Apart from delivering quality education our faculty members are also engaged in maintaining overall record of development of each and every student of this College. Each faculty member is allotted a group of students to maintain development records and to co-ordinate with the students and helps them in their academics.

The college is equipped with an in house canteen facility for refreshment of the staff and students at reasonable rates in a hygienic environment. Purified drinking water facility is available for all in the college campus.

COURSES AND ADMISSIONS

THE COLLEGE OFFERS THE FOLLOWING COURSES OF STUDY

- **Bachelor of Commerce (B.Com.) (Three Year Degree Course in Semester System) under Gauhati University.**
- **Bachelor of Business Administration (BBA) (Three Year Degree Course in Semester System) under Gauhati University.**
- **Bachelor of Computer Application (B.C.A.) (Three Year Degree Course in Semester System) under Gauhati University.**
- **Bachelor of Arts (B.A.) (Three Year Degree Course in Semester System) under Gauhati University.**
- **Bachelor of Science (B.Sc.) (Three Year Degree Course in Semester System) under Gauhati University.**
- **Master of Commerce (M.Com.) (Post Graduate Course in Commerce in Semester System) under Gauhati University.**

Admission Procedure

1. A student can opt for Online or Offline admission process.
2. For online admission the students will have to visit www.iconcommercecollege.in and follow the instructions given in the website.
3. For offline admission the students will have to purchase the College Prospectus and Admission Form which will be issued from the office counter on payment of requisite fees. The student will submit the duly filled in Admission Form and required documents in the office counter and can take the admission in the respective semester after payment of the requisite fees.

Bachelor of Science (B.Sc.)

Duration: 3 Years (6 Semesters)
Course affiliated to: Gauhati University.

Eligibility for Admission: To be eligible for admission to the B.Sc 1st Semester class, a student has to pass the Higher Secondary (10+2) Examination in Science stream under the Assam Higher Secondary Education Council (AHSEC) or any other equivalent examination of Board / Council recognised by Gauhati University.

For Document verification candidates are required to produce the original copies of the following at the College office:

- Mark sheet of the last qualifying examination (HS).
- Registration Certificate / Migration Certificate of the board / council under which the last qualifying examination was appeared.
- Students passing the qualifying examination earlier than the current year will have to submit a Gap Certificate in the form of an **Affidavit.**

FEES STRUCTURE OF B.Sc. 1st SEMESTER, 2021

Sl. No.	Particulars	Amount
01	Admission Fees	**₹3000**
02	Semester Tuition Fees	**₹3000**
03	College Examination, Sessional Examination and Examination Micro-Zone Fees	**₹2000**
04	Library Fees	**₹600**
05	College Functions, and Co-Curricular activities	**₹1200**
06	College Development and Maintenance Fees	**₹6400**
07	College Exercise Books	**₹200**
08	Printing works, Stationary, Photostat of Grade-sheets and Other record book maintenance fees	**₹500**
09	ID-Card and Entry pass Fees	**₹100**
10	Practical Lab Maintenance Fees	**₹500**
11	College Magazine Fees (Yearly)	**₹500**
12	Expenses for contacting students/ guardians over phone, postal communication charge, conveyance charge for delivery of letters to guardians/ students in case of necessity.	**₹300**
13	Prospectus Fees and Application Fees	**₹300**
	Total Amount	**₹ 18600**

N.B. : Registration Fees/ Enrolment Fees/ University Examination Fees /Other fees payable to GU are subject to change and will be charged as per the regulation issued by the concerned authority. Fees once paid are not refundable under any circumstances.

FACULTY OF ICON COMMERCE COLLEGE

Dr. Nilanjan Bhattacharjee, M.Com, Ph.D., Principal, Icon Commerce College

Dr. Pranab Kumar Bhattacharjee, M.Com, Ph.D., Director, Icon Commerce College

Sawpon Dowerah, M.A., PGDTE, Rector, Icon Commerce College

Dr. Afazur Rahman, M.Com, Ph.D., PGDBM, Academic Dean, Icon Commerce College

Mr. Jayanta Banik, M.Com, Administrative Advisor, Icon Commerce College

Faculty Members

1) Dr. Mandira Saha, M.Com, M.Phil, Ph.D.
2) Prof. Rikia Chakraborty, M.Com, PGDMB
3) Prof. Mandira Sharma, M.Sc., M.Phil.
4) Dr. Smita Roy, M.Com, PGDBFS, B.Ed. Ph.D.
5) Prof. Rubi Das, M.Com, M.Phil, B.Ed, SLET
6) Dr. Mallika Das, M.Com, M.Phil, Ph.D.
7) Prof. Tridib Kr. Handique, M.C.A.
8) Prof. Esha Chetri, M.Com, B.Ed.
9) Dr. Jinti Sharma, M.Com, Ph.D, SLET
10) Prof. Anuradha Bhuyan, M.Com, M.B.A, SLET
11) Prof. Niti Mazumdar, M.A, B.Ed., SLET
12) Prof. Basu Mandal, M.Com, NET
13) Prof. Manas Kr. Chakraborty, M.C.A.
14) Prof. Pankaj Kr. Sharma, M.B.A., M.Com
15) Prof. Kongkona Bhagawati, M.Com, M.B.A.
16) Prof. Jinty Dutta, M.B.A.
17) Prof. Pallabi Dutta, M.A.
18) Prof. Dipannita Chakraborty, M.A., LLB.
19) Dr. Amulya Choudhury, M.Sc. Ph.D.
20) Prof. Dwijen Medhi, M.Sc.
21) Dr. Kakali Sharma, M.Sc., Ph.D.
22) Prof. Manju Das, M.Sc.
23) Prof. Dhrubajyoti Nath, M.Sc.
24) Prof. Sanjoy Dutta, M.Sc., PGDCA

Library Staff :

1) Smt. Kabita Boro, M.Lib.Sc., Librarian
2) Sri. Sudipto Acharjee, Asst. to the Librarian.

Office Staff: Office Assistant

1) Sri. Samiran Chanda
2) Sri. Shivam Paul

Office Staff: Grade-IV

1) Sri. Bhaskar Kalita
2) Sri. Kalicharan Das
3) Sri. Sudip Das
4) Sri. Ranjit Patowary
5) Sri. Manoj Basfor

GENERAL INSTRUCTIONS & INFORMATION FOR STUDENTS

1. Classes begin at 10 AM as per class routine.
2. **Each student is required to attend a minimum of 75% of the total classes held in each subject in an academic session.** The College takes students' Class Attendance strictly into account for the purpose of allowing students for appearing in the Sessional examination and filling up of forms for examinations, and scholarships.
3. All students admitted in the college must come wearing complete college uniform which includes:

   For B.Sc.:

   i. **For B.Sc. Students (Boys):** Plain white shirt with college crest on the pocket and light brown formal pant.

   ii. **For B.Sc. Students (Girls):** Light brown colour salwar and duppatta and white kameez with college crest.

   iii. Light brown colour blazer / sweater for boys and girls during winter. Other varieties with other colours are strictly prohibited.

   iv. Black colour formal shoes for boys and simple normal sandals for girls are allowed.
4. For College Uniform students must contact: **SUMAN DRESSES**, Opposite Harisabha, Panbazar, Guwahati – 781001.

   Phone No.: 0361-2630292 / 9864124419 / 9864059229
5. It is compulsory for all the students to use only Icon Commerce College Exercise Books which are available at the College library.
6. Students should abide by the rules and regulations of the college.They are expected to maintain strict discipline. Violation of rules and regulations will be treated as punishable offence and in extreme cases erring students are liable to be expelled from the college. Disciplinary actions are under the preview of the College Management Committee and their decision on such matter is final and binding on students.
7. Students are advised to be regular in attending their classes.
8. Late arrival of students for classes will not be allowed.
9. Students must bring college record book and identity card everyday while coming to college. They are to submit college record book everyday to the teacher in the first period which will be returned to them in the last period after marking their attendance for the day. No student will be allowed to attend classes without College Record Book. Duplicate Identity Card and College Record Book may be issued on genuine grounds and on payment of requisite fees.
10. Students should maintain discipline and decorum whenever they are inside the college premises.
11. In matters of holidays, Gauhati University Holiday list is to be followed. On special occasions State Government holiday notifications are also followed.
12. Do not move in the corridors and verandahs when classes are on. Any student found loitering in the verandahs without any valid reason will have to face strict disciplinary action.
13. **Do not use Mobile Phone inside the classrooms or in the verandahs of the college. Improper use of Mobile phone within the college premises will be severely dealt with.**
14. Consumption of alcoholic beverages, smoking inside the College premises is strictly prohibited.
15. Chewing of tobacco, betel nut, taking pan masala etc, inside the College campus is strictly prohibited.

16. Keep your College clean.
17. **DONOT SPIT ON THE WALLS AND IN THE CLASS ROOMS, DO NOT WRITE OR STICK ANYTHING ON THE WALLS OR DESKS AND BENCHES. Anyone caught red-handed will be punished.**
18. The Parents / Guardians are requested to meet the College authority periodically and exchange views on the progress of their wards in any academic matter. Periodic feedback from Parents / Guardians is desirable for initiating necessary actions for academic improvement of the students and on disciplinary matters. Parents / Guardians are requested to put their signature in the college record book of their ward everyday in the required place.
19. Students are required to take care of the college property and should not cause any damage to the college property. Any student found causing damage to the college property will be penalized which also includes expulsion from the institution.
20. **RAGGING IN ANY FORM IS STRICTLY PROHIBITED AND IS TREATED AS A PUNISHABLE OFFENCE. Punishment may also lead to expulsion from the college and strict legal action will also be taken.**
21. Students getting involved in any activity detrimental to the college interest and involved in any anti social, anti national and anti college activity will lead to expulsion from the college.
22. Students can avail Scholarships of Government approved Schemes through this College. (For more information students can contact Institute Nodal Officer for Scholarships).

ABOUT CHOICE BASED CREDIT SYSTEM (CBCS):

The Choice Based Credit System is the logical next step in a credit based semester system becoming more learner-centric. The undergraduate degree programme in the CBCS will have courses spread across six semesters. A typical semester will comprise a minimum of 15 to 18 weeks of academic work that will translate into 90 actual teaching days. Two consecutive (one odd and one even) semesters will make up an academic year. An UG course shall be of Six Semesters covering three Calendar Years (Academic Sessions – June to May). The duration of the Odd Semesters (First, Third and Fifth) shall be 'June to November', and that of Even Semesters (Second, Fourth and Sixth) shall be 'December to May'.

CBCS Course Structure for B.Sc. Physics (Honours) Programme

Type	Core	AECC	SEC	DSE	GE
Credits	**14 × 6 = 84**	**2 × 4 = 8**	**2 × 4 = 8**	**4 × 6 = 24**	**4 × 6 = 24**
Semester I	PHY-HC-1016 PHY-HC-1026	ENG-AE-1014			AAA-HG-1016
Semester II	PHY-HC-2016 PHY-HC-2026	ENV-AE-2014			BBB-HG-2016
Semester III	PHY-HC-3016 PHY-HC-3026 PHY-HC-3036		PHY-SE-3XX4		CCC-HG-3016
Semester IV	PHY-HC-4016 PHY-HC-4026 PHY-HC-4036		PHY-SE-4XX4		DDD-HG-4016
Semester V	PHY-HC-5016 PHY-HC-5026			PHY-HE-5XX6 PHY-HE-5YY6	
Semester VI	PHY-HC-6016 PHY-HC-6026			PHY-HE-6XX6 PHY-HE-6YY6	

Legends

HC : Core Papers SE : Skill Enhancement Papers HE : Discipline Specific Elective Papers HG : Generic Elective Papers

Directives & Advisory

(a) *A student majoring (honours) in Physics MAY take GE papers from any available discipline in the college, except Physics.*

(b) *It is advisable that a student majoring (honours) in Physics take at least one GE paper from Mathematics*

B.Sc. Honours Physics

Semester Wise Credit Distribution

Semester	Core Papers	AECC	SEC	DSE	Generic Elective	Total Credit
First	2×6	1×4			1×6	22
Second	2×6	1×4			1×6	22
Third	3×6		1×4		1×6	28
Fourth	3×6		1×4		1×6	28
Fifth	2×6			2×6		24
Sixth	2×6			2×6		24
Total	**84**	**8**	**8**	**24**	**24**	**148**

List of Papers

Honours Core Papers

1. PHY-HC-1016 : Mathematical Physics I
2. PHY-HC-1026 : Mechanics
3. PHY-HC-2016 : Electricity & Magnetism
4. PHY-HC-2026 : Waves & Optics
5. PHY-HC-3016 : Mathematical Physics II
6. PHY-HC-3026 : Thermal Physics
7. PHY-HC-3036 : Digital Systems & Applications
8. PHY-HC-4016 : Mathematical Physics III
9. PHY-HC-4026 : Elements of Modern Physics
10. PHY-HC-4036 : Analog Systems & Applications
11. PHY-HC-5016 : Quantum Mechanics & Applications
12. PHY-HC-5026 : Solid State Physics
13. PHY-HC-6016 : Electromagnetic Theory
14. PHY-HC-6026 : Statistical Mechanics

Discipline Specific Elective (DSE) Papers

1. PHY-HE-5016 : Experimental Techniques (PHY-RE-5016)
2. PHY-HE-5026 : Embedded Sys: Introduction to Microcontrollers (PHY-RE-5026)
3. PHY-HE-5036 : Advanced Mathematical Physics I (PHY-RE-5036)
4. PHY-HE-5046 : Physics of Devices and Instruments (PHY-RE-5046)
5. PHY-HE-5056 : Particle and Nuclear Physics (PHY-RE-5056)
6. PHY-HE-6016 : Communication Electronics (PHY-RE-6016)
7. PHY-HE-6026 : Digital Signal Processing (PHY-RE-6026)
8. PHY-HE-6036 : Advanced Mathematical Physics II (PHY-RE-6036)
9. PHY-HE-6046 : Astronomy and Astrophysics (PHY-RE-6046)
10. PHY-HE-6056 : Classical Dynamics (PHY-RE-6056)

Generic Elective (GE) Papers for other Disciplines

1. PHY-HG-1016 : Mechanics (PHY-RC-1016)
2. PHY-HG-2016 : Electricity & Magnetism (PHY-RC-2016)
3. PHY-HG-3016 : Thermal Physics & Statistical Mechanics (PHY-RC-3016)
4. PHY-HG-4016 : Waves & Optics (PHY-RC-4016)

Skill Enhancement (SE) Papers

1. PHY-SE-3014 : Physics Workshop Skills
2. PHY-SE-3024 : Computational Physics Skills
3. PHY-SE-3034 : Computer Assembling and Networking
4. PHY-SE-3044 : Digital Photography and editing
5. PHY-SE-3054 : Video editing for social media
6. PHY-SE-3064 : Weather Forecast
7. PHY-SE-3074 : Applied Optics
8. PHY-SE-3084 : Technical Drawing
9. PHY-SE-3094 : PageMaker
10. PHY-SE-4014 : Basic Instruments Skills
11. PHY-SE-4024 : Research & Technical Writing
12. PHY-SE-4034 : Domestic and industrial wiring
13. PHY-SE-4044 : Photoshop
14. PHY-SE-4054 : Motion graphics for advertising and films
15. PHY-SE-4064 : Radiation Safety
16. PHY-SE-4074 : Renewable energy

17. PHY-SE-4084 : Introduction to CorelDraw
18. PHY-SE-4094 : Graphic design for digital advertising

Note:

(a) The courses given in Red colour are equivalent in content to the corresponding courses given alongside.

(b) In the Lab classes, wherever applicable, students and instructors can use either of C, C++, FORTRAN 90/95, Matlab, Scilab, or Python environment.

(c) Marks in questions papers must appear approximately, if not exactly, in the proportion of number of lectures assigned to various modules of a particular paper. However, marks in the question paper should not exceed 1.25 times the number of assigned lectures of a module under any circumstances.

For detailed syllabus follow the link:
https://sites.google.com/a/gauhati.ac.in/syllabus-ug-cbcs/honours/physics

CBCS Course Structure for B.Sc. Physics (Regular) Programme

Type	Core	AECC	SEC	DSE
Credits	**12 × 6 = 72**	**2 × 4 = 8**	**4 × 4 = 16**	**6 × 6 = 36**
Semester I	PHY-RC-1016 XXX-RC-1016 YYY-RC-1016	ENG-AE-1014		
Semester II	PHY-RC-2016 XXX-RC-2016 YYY-RC-2016	ENV-AE-1014		
Semester III	PHY-RC-3016 XXX-RC-3016 YYY-RC-3016		PHY-SE-3XX4	
Semester IV	PHY-RC-4016 XXX-RC-4016 YYY-RC-4016		PHY-SE-4XX4	
Semester V			PHY-SE-5XX4	PHY-RE-5XX6 XXX-RE-5XX6 YYY-RE-5XX6
Semester VI			PHY-SE-6XX4	PHY-RE-6XX6 XXX-RE-6XX6 YYY-RE-6XX6

Legends

HC: Core Papers SE: Skill Enhancement Papers HE: Discipline Specific Elective Papers HG: Generic Elective Papers Directives & Advisory

(a) A student majoring (honours) in Physics MAY take GE papers from any available discipline in the college, except Physics.

(b) It is advisable that a student majoring (honours) in Physics take at least one GE paper from Mathematics

B.Sc. Regular Physics

Semester Wise Credit Distribution

Semester	Core Papers	AECC	SEC	DSE	Total Credit
First	**3×6**	**1×4**			**22**
Second	**3×6**	**1×4**			**22**
Third	**3×6**		**1×4**		**22**
Fourth	**3×6**		**1×4**		**22**
Fifth			**1×4**	**3×6**	**22**
Sixth			**1×4**	**3×6**	**22**
Total	**72**	**8**	**16**	**36**	**132**

List of Papers

Core Papers

1. PHY-RC-1016 : Mechanics (PHY-HG-1016)
2. PHY-RC-2016 : Electricity & Magnetism (PHY-HG-2016)
3. PHY-RC-3016 : Thermal Physics & Statistical Mechanics (PHY-HG-3016)
4. PHY-RC-4016 : Waves & Optics (PHY-HG-4016)

Discipline Specific Elective (DSE) Papers

1. PHY-HE-5016 : Experimental Techniques (PHY-RE-5016)
2. PHY-HE-5026 : Embedded Sys : Introduction to Microcontrollers (PHY-RE-5026)
3. PHY-HE-5036 : Advanced Mathematical Physics I (PHY-RE-5036)
4. PHY-HE-5046 : Physics of Devices and Instruments (PHY-RE-5046)
5. PHY-HE-5056 : Nuclear and Particle Physics (PHY-RE-5056)
6. PHY-HE-6016 : Communication Electronics (PHY-RE-6016)
7. PHY-HE-6026 : Digital Signal Processing (PHY-RE-6026)
8. PHY-HE-6036 : Advanced Mathematical Physics II (PHY-RE-6036)
9. PHY-HE-6046 : Astronomy and Astrophysics (PHY-RE-6046)
10. PHY-HE-6056 : Classical Dynamics (PHY-RE-6056)

Generic Elective (GE) Papers

1. PHY-HG-1016 : Mechanics (PHY-RC-1016)
2. PHY-HG-2016 : Electricity & Magnetism (PHY-RC-2016)
3. PHY-HG-3016 : Thermal Physics & Statistical Mechanics (PHY-RC-3016)
4. PHY-HG-4016 : Waves & Optics (PHY-RC-4016)

Skill Enhancement (SE) Papers

1. PHY-SE-3014 : Physics Workshop Skills
2. PHY-SE-3024 : Computational Physics Skills
3. PHY-SE-3034 : Computer Assembling and Networking
4. PHY-SE-3044 : Digital Photography and editing
5. PHY-SE-3054 : Video editing for social media
6. PHY-SE-4014 : Basic Instruments Skills

7. PHY-SE-4024 : Research & Technical Writing
8. PHY-SE-4034 : Domestic and industrial wiring
9. PHY-SE-4044 : Photoshop
10. PHY-SE-4054 : Motion graphics for advertising and films
11. PHY-SE-5014 : Weather Forecast
12. PHY-SE-5024 : Applied Optics
13. PHY-SE-5034 : Technical Drawing
14. PHY-SE-5044 : PageMaker
15. PHY-SE-6014 : Radiation Safety
16. PHY-SE-6024 : Renewable energy
17. PHY-SE-6034 : Introduction to CorelDraw
18. PHY-SE-6044 : Graphic design for digital advertising

Note :

(a) ***The courses given in Red colour are equivalent in content to the corresponding courses given alongside.***

(b) ***In the Lab classes, wherever applicable, students and instructors can use either of C, C++, FORTRAN 90/95, Matlab, Scilab, or Python environment.***

(c) ***Marks in questions papers must appear approximately, if not exactly, in the proportion of number of lectures assigned to various modules of a particular paper. However, marks in the question paper should not exceed 1.25 times the number of assigned lectures of a module under any circumstances***.

For detailed syllabus follow the link:
https://sites.google.com/a/gauhati.ac.in/syllabus-ug-cbcs/regular/physics

CBCS Course Structure for B.Sc. Chemistry (Honours) Programme

SEMESTER	COURSE CODE	COURSE NAME	Credits
I	ENG-AE-1014	English Communications	4
	CHE-HC-1016	Inorganic Chemistry-I Inorganic Chemistry-ILab	4+2=6
	CHE-HC-1026	Physical Chemistry-I Physical Chemistry-I Lab	4+2=6
	AAA-HG-1YY6*	GE-1 Generic Elective -1 Practical/Tutorial	4+2/5+1=6
Total Credits in Semester I			22
II	Ability Enhancement Compulsory Course-II**	Environmental Studies	4
	CHE-HC-2016	Organic Chemistry-I Organic Chemistry-I Lab	4+2=6
	CHE-HC-2026	Physical Chemistry-II Physical Chemistry-II Lab	4+2=6
	AAA-HG-2YY6*	GE-2 Generic Elective -2 Practical/Tutorial	4+2/5+1=6
Total Credits in Semester II			22
III	CHE-HC-3016	Inorganic Chemistry-II Inorganic Chemistry-IILab	4+2=6
	CHE-HC-3026	Organic Chemistry-II Organic Chemistry-II Lab	4+2=6
	CHE-HC-3036	Physical Chemistry-III Physical Chemistry-IIILab	4+2=6
	CHE-SE-3YY4†	SEC-1	4
	AAA-HG-3YY6*	GE-3 Generic Elective -3 Practical/Tutorial	4+2/5+1=6
Total Credits in Semester III			28
IV	CHE-HC-4016	Inorganic Chemistry-III Inorganic Chemistry-IIILab	4+2=6
	CHE-HC-4026	Organic Chemistry-III Organic Chemistry-IIILab	4+2=6
	CHE-HC-4036	Physical Chemistry-IV Physical Chemistry-IVLab	4+2=6
	CHE-SE-4YY4†	SEC -2	4
	AAA-HG-4YY6*	GE-4 Generic Elective -4 Practical	4+2/5+1=6
Total Credits in Semester IV			28
V	CHE-HC-5016	Organic Chemistry-IV	4+2=6

		Organic Chemistry-IVLab	
	CHE-HC-5026	**Physical Chemistry-V** **Physical Chemistry-VLab**	**4+2=6**
	CHE-HE-5YY6‡	**DSE-1** **DSE-1 Lab**	**4+2=6**
	CHE-HE-5YY6‡	**DSE-2** **DSE-2 Lab**	**4+2=6**
Total Credits in Semester V			**24**
VI	**CHE-HC-6016**	**Inorganic Chemistry-IV** **Inorganic Chemistry-IVLab**	**4+2=6**
	CHE-HC-6026	**Organic Chemistry-V** **Organic Chemistry-VLab**	**4+2=6**
	CHE-HE-6YY6‡	**DSE-3** **DSE-3 Lab**	**4+2=6**
	CHE-HE-6YY6‡	**DSE-4** **DSE-3 Lab/tutorial**	**4+2=6**
Total Credits in Semester VI			**24**
Grand Total Credits			**148**

Generic Electives (Other Discipline) - GE 1 to GE 4

1. Mathematics
2. Physics
3. Economics
4. Computer Science
5. Zoology
6. Botany
7. Statistics
8. Geology
9. Biotechnology
10. Anthropology

**** a) Generic Electives (GE) are to be taken preferably from Physics and Mathematics disciplines.***

b) Students can choose minimum of two GE papers from two different disciplines or four papers from one discipline.

c) Some Universities in India require at least two mathematics papers to be studied by the student for admission into M. Sc. (Chemistry).

‡ Discipline Specific Elective Papers: (Credit: 06 each) (4 papers to be selected)-

DSE for Semester V DSE-1(Any One from the following)

1. **CHE-HE-5016:** Applications of Computers in Chemistry (4) + Lab (2)
2. **CHE-HE-5026:** Analytical Methods in Chemistry (4) + Lab (2)
3. **CHE-HE-5036:** Molecular Modelling & Drug Design (4) + Lab (2)

DSE-2(Any One from the following)

4. **CHE-HE-5046:** Novel Inorganic Solids (4) + Lab (2)
5. **CHE-HE-5056:** Polymer Chemistry (4) + Lab (2)
6. **CHE-HE-5066:** Instrumental Methods of Analysis (4) + Lab (2)

DSE for Semester VI

DSE-3(Any One from the following)

7. **CHE-HE-6016:** Green Chemistry (4) + Lab (2)
8. **CHE-HE-6026:** Industrial Chemicals & Environment (4) + Lab (2)

9. **CHE-HE-6036:** Inorganic Materials of Industrial Importance (4) + Lab (2)

DSE-4(Any One from the following)

10. **CHE-HE-6046:** Research Methodology for Chemistry (5) + Tutorials (1)
11. **CHE-HE-6056:** Dissertation

† Skill Enhancement Courses (04 papers) (Credit: 04 each)

SEC for Semester III

Any One from the following

1. **AAA-SE-3014 :** English (Syllabus will be available on the GU website)
2. **CHE-SE-3024:** IT Skills for Chemists
3. **CHE-SE-3034:** Basic Analytical Chemistry
4. **CHE-SE-3044:** Chemical Technology & Society
5. **CHE-SE-3054:** Chemoinformatic
6. **CHE-SE-3064:** Business Skills for Chemists
7. **CHE-SE-3074:** Intellectual Property Rights

SEC for Semester IV

Any One from the following

8. **CHE-SE-4014:** Analytical Clinical Biochemistry
9. **CHE-SE-4024:** Green Methods in Chemistry
10. **CHE-SE-4034:** Pharmaceutical Chemistry
11. **CHE-SE-4044:** Chemistry of Cosmetics & Perfumes
12. **CHE-SE-4054:** Pesticide Chemistry
13. **CHE-SE-4064:** Fuel Chemistry

****Ability Enhancement Compulsory Courses (02 papers) (Credit: 04 each)**

AECC for Semester I

1. **ENG-AE-1014: English Communications**
   (https://sites.google.com/a/gauhati.ac.in/syllabus-ug- cbcs/aecc/english-a)

AECC for Semester II

ENV-AE-2014: Environmental Studies (Syllabus will be available on the GU website)

For detailed syllabus follow the link:
https://sites.google.com/a/gauhati.ac.in/syllabus-ug-cbcs/honours/chemistry

CBCS Course Structure for B.Sc. Chemistry (Regular) Programme

SEMESTER	COURSE OPTED	COURSE NAME	Credits
I	ENG-AE-1014/ASM- AE-1014	**English/MIL communications**	**4**
	XXX-RC-1016	**DSC 1A**	6
	CHE-RC-1016	**CHEMISTRY1** Atomic Structure, Bonding, General Organic Chemistry & Aliphatic Hydrocarbons	4+2=6
		Lab- CHEMISTRY1	
	ZZZ-RC-1016	**DSC 3A**	6
Total Credits in Semester I			22
II	ENV-AE-2014	**Environmental Studies**	4
	XXX-RC-2016	**DSC 1B**	6
	CHE-RC-2016	**CHEMISTRY2-** *s*- and *p*-Block Elements, Transition Elements, Coordination Chemistry States of Matter & Chemical Kinetics	4+2=6
		Lab- CHEMISTRY2	
	ZZZ-RC-2016	**DSC 3B**	6
Total Credits in Semester II			22
III	XXX-RC-3016	**DSC 1C**	6
	CHE-RC-3016	**CHEMISTRY3** Chemical Energetics, Equilibria & Functional Group Organic Chemistry-I	4+2=6
		Lab- CHEMISTRY3	
	ZZZ-RC-3016	**DSC 3C**	6
	XXX-SE-3YY4*	**SEC-1**	4
Total Credits in Semester III			**22**
IV	XXX-RC-4016	**DSC 1D**	6
	CHE-RC-4016	**CHEMISTRY4** Solutions, Phase Equilibrium, Conductance, Electrochemistry & Functional Group Organic Chemistry-II	4+2=6
		Lab- CHEMISTRY4	
	ZZZ-RC-4016	**DSC 3D**	6
	XXX-SE-4XX4*	**SEC-2**	4
Total Credits in Semester IV			22
V	XXX-SE-5XX4*	**SEC-3**	4
	XXX-RE-5XX6	**DSE-1A**	6
	CHE-RE-5YY6†	**DSE-2A**	6
		Lab- DSE-2A	
	ZZZ-RE-5XX6	**DSE-3A**	6
Total Credits in Semester V			22
VI	XXX-SE-6XX4*	**SEC-4**	4
	XXX-RE-6XX6	**DSE-1B**	6
	CHE-RE-6YY6†	**DSE-2B**	6
		Lab-DSE-2B	
	ZZZ-RE-6XX6	**DSE-3B**	6
Total Credits in Semester VI			22
Grand Total Credits			**132**

Core courses for B. Sc. with Chemistry (Credit: 06 each) /Chemistry as Generic Elective for other disciplines (Credit: 06 each)

CHE-RC/HG-1016. CHEMISTRY1: AtomicStructure, Bonding, General Organic Chemistry & Aliphatic Hydrocarbons (4) + Lab (2)

CHE-RC/HG-2016. CHEMISTRY2: *s*- and *p*-Block Elements, Transition Elements, Coordination Chemistry States of Matter & Chemical Kinetics (4) + Lab (2)

CHE-RC/HG-3016. CHEMISTRY3: Chemical Energetics, Equilibria & Functional Group Organic Chemistry-I (4) + Lab (2)

CHE-RC/HG-4016. CHEMISTRY4: Solutions, Phase Equilibrium, Conductance, Electrochemistry & Functional Group Organic Chemistry-II (4) + Lab (2)

† Discipline Specific Elective Papers: (Credit: 06 each) (2 papers to be selected)- DSE 1-2

DSE for Semester V DSE-1(Any One from the following)

1. **CHE-RE-5016.** Applications of Computers in Chemistry (4) + Lab (2)
2. **CHE-RE-5026.** Analytical Methods in Chemistry (4) + Lab (2)
3. **CHE-RE-5036.** Molecular Modelling & Drug Design (4) + Lab (2)
4. **CHE-RE-5046.** Novel Inorganic Solids (4) + Lab (2)
5. **CHE-RE-5056.** Polymer Chemistry (4) + Lab (2)
6. **CHE-RE-5066.** Instrumental Methods of Analysis (4) + Lab (2)

DSE for Semester VI

DSE-2(Any One from the following)

7. **CHE-RE-6016.** Green Chemistry (4) + Lab (2)
8. **CHE-RE-6026.** Industrial Chemicals & Environment (4) + Lab (2)
9. **CHE-RE-6036.** Inorganic Materials of Industrial Importance (4) + Lab (2)
10. **CHE-RE-6046.** Research Methodology for Chemistry (5) + Tutorials (1)
11. **CHE-RE-6056.** Dissertation (6)

*** Skill Enhancement Courses (04 papers) (Credit: 04 each)- SEC1 to SEC4 (Students may choose SEC papers from same or different disciplines)**

SEC for Semester III

Any One from the following

1. **AAA-SE-3014:** English (Syllabus will be available on the GU website)
2. **CHE-SE-3024:** IT Skills for Chemists
3. **CHE-SE-3034:** Basic Analytical Chemistry

SEC for Semester IV

Any One from the following

4. **CHE-SE-4014:** Analytical Clinical Biochemistry
5. **CHE-SE-4024:** Green Methods in Chemistry
6. **CHE-SE-4034:** Pharmaceutical Chemistry

SEC for Semester V

Any One from the following

7. **CHE-SE-5014:** Chemical Technology & Society
8. **CHE-SE-5024:** Chemoinformatic
9. **CHE-SE-5034:** Business Skills for Chemists
10. **CHE-SE-5044:** Intellectual Property Rights

SEC for Semester VI

Any One from the following

11. **CHE-SE-6014:** Chemistry of Cosmetics & Perfumes
12. **CHE-SE-6024:** Pesticide Chemistry
13. **CHE-SE-6034:** Fuel Chemistry

Ability Enhancement Compulsory Courses (02 papers) (Credit: 04 each)- AECC1 to AECC2

AECC for Semester I

1. **ENG-AE-1014: English Communications**
   (https://sites.google.com/a/gauhati.ac.in/syllabus-ug- cbcs/aecc/english-a)

AECC for Semester II

ENV-AE-2014: Environmental Studies

For detailed syllabus follow the link:
https://sites.google.com/a/gauhati.ac.in/syllabus-ug-cbcs/regular/chemistry

CBCS Course Structure for B.Sc. Mathematics (Honours) Programme

Sem	Core Course (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2)	Discipline Specific Elective (DSE)(4)	Generic Elective (GE) (4) (Other than Mathematics Honours)
I	MAT-HC-1016: Calculus (including practical) MAT-HC-1026: Algebra	ENG-AE-1014			MAT-HG-1016 / MAT-RC-1016 MAT-HG 1026
II	MAT-HC-2016: Real Analysis MAT-HC-2026: Differential Equations (including practical)	ENV-AE-2014			MAT-HG-2016 / MAT-RC-2016 MAT-HG-2026
III	MAT-HC-3016: Theory of RealFunctions MAT-HC-3026: Group Theory-I MAT-HC-3036: AnalyticalGeometry		MAT-SE-3014 MAT-SE-3024		MAT-HG-3016 / MAT-RC-3016 MAT-HG-3026
IV	MAT-HC-4016: Multivariate Calculus MAT-HC-4026: Numerical Methods (including practical) MAT-HC-4036: Ring Theory		MAT-SE-4014 MAT-SE-4024		MAT-HG-4016 / MAT-RC-4016 MAT-HG-4026
V	MAT-HC-5016: Riemann Integration and Metric spaces MAT-HC-5026: Linear Algebra			DSE-1 MAT-HE-5016 MAT-HE-5026 MAT-HE-5036 DSE-2 MAT-HE-5046 MAT-HE-5056 MAT-HE-5066	
VI	MAT-HC-6016: Complex Analysis MAT-HC-6026: Partial Differential Equations (including practical)			DSE-3 MAT-HE-6016 MAT-HE-6026 MAT-HE-6036 MAT-HE-6046 DSE-4 MAT-HE-6056 MAT-HE-6066 MAT-HE-6076 Project In lieu of DSE-3 and DSE- 4	

Legends: HC: Core Papers HE: Discipline Specific Elective Papers
SE: Skill Enhancement Papers HG: Generic Elective Papers

Core Papers:

1. MAT-HC-1016: Calculus (including practical)
2. MAT-HC-1026: Algebra
3. MAT-HC-2016: Real Analysis
4. MAT-HC-2026: Differential Equations (including practical)
5. MAT-HC-3016: Theory of Real Functions
6. MAT-HC-3026: Group Theory-I
7. MAT-HC-3036: Analytical Geometry
8. MAT-HC-4016: Multivariate Calculus
9. MAT-HC-4026: Numerical Methods (including practical)
10. MAT-HC-4036: Ring Theory
11. MAT-HC-5016: Riemann Integration and Metric spaces
12. MAT-HC-5026: Linear Algebra
13. MAT-HC-6016: Complex Analysis
14. MAT-HC-6026: Partial Differential Equations (including practical)

Skill Enhancement Course (SEC) papers SEC 1(choose one)

(i) MAT-SE-3014: Computer Algebra Systems and Related Software
(ii) MAT-SE-3024: Combinatorics and Graph Theory

SEC 2 (choose one)

(i) MAT-SE-4014: R-Programming
(ii) MAT-SE-4024: LATEX and HTML

Discipline Specific Electives (DSE) papers DSE 1 (choose one)

(i) MAT-HE-5016: Number Theory
(ii) MAT-HE-5026: Mechanics
(iii) MAT-HE-5036: Probability and Statistics

DSE 2 (choose one)

(i) MAT-HE-5046: Linear Programming
(ii) MAT-HE-5056: Spherical Trigonometry and Astronomy
(iii) MAT-HE-5066: Programming in C

DSE-3 (choose one)

(i) MAT-HE-6016: Boolean Algebra and Automata Theory
(ii) MAT-HE-6026: Bio-Mathematics
(iii) MAT-HE-6036: Mathematical Modeling
(iv) MAT-HE-6046: Hydromechanics

DSE 4 (choose one)

(i) MAT-HE-6056: Rigid Dynamics
(ii) MAT-HE-6066: Group Theory II
(iii) MAT-HE-6076: Mathematical Finance

Project (in lieu of DSE3 and DSE4)

Generic Elective (GE) papers

GE 1 (choose one)

(i). MAT-HG-1016/MAT-RC-1016: Calculus
(ii). MAT-HG-1026: Analytic Geometry

GE 2 (Choose one)

(i). MAT-HG-2016/MAT-RC-2016: Algebra
(ii). MAT-HG-2026: Discrete Mathematics

GE 3 (choose one)

(i). MAT-HG-3016/MAT-RC-3016: Differential Equations
(ii). MAT-HG-3026: Linear Programming

GE 4 (choose one)

(i). MAT-HG-4016/MAT-RC-4016: Real Analysis

(ii). MAT-HG-4026: Numerical Analysis

For detailed syllabus follow the link:
https://sites.google.com/a/gauhati.ac.in/syllabus-ug-cbcs/honours/mathematics

CBCS Course Structure for B.Sc. Mathematics (Regular) Programme

Semester	Core Course (12)	Ability Enhancement Compulsory Course (AECC)(2)	Skill Enhancement Course (SEC) (4)	Discipline Specific Elective (DSE)(6)
I	**MAT-RC-1016: Calculus**	**ENG-AE-1014**		
II	**MAT-RC-2016: Algebra**	**ENV-AE-2014**		
III	**MAT-RC-3016: DifferentialEquations**		**SEC-1** **MAT-SE-3014:** Computer Algebra Systems and Related Software	
IV	**MAT-RC-4016: Real Analysis**		**SEC-2** **MAT-SE-4014:** R Programming	
V			**SEC-3** **MAT-SE-5014:** Combinatorics and Graph Theory	**DSE-1** **MAT-RE-5016:** Number Theory **MAT-RE-5026:** Discrete Mathematics
VI			**SEC-4** **MAT-SE-6014:** LaTeX and HTML	**DSE-2** **MAT-RE-6016:** Numerical Analysis **MAT-RE-6026:** Programming in C

Legends:

RC: Regular Core RE: Regular Discipline Specific Elective SE: Skill Enhancement Course

Core papers (Mathematics):

1. MAT-RC-1016: Calculus
2. MAT-RC-2016: Algebra

3. MAT-RC-3016: Differential Equations
4. MAT-RC-4016: Real Analysis

Skill Enhancement Course (SEC) papers

SEC-1

MAT-SE-3014: Computer Algebra Systems and Related Software

SEC-2

MAT-SE-4014: R Programming

SEC-3

MAT-SE-5014: Combinatorics and Graph Theory

SEC-4

MAT-SE-6014: LaTeX and HTML

Discipline Specific Elective (DSE) papers

DSE-1 (Choose one)

MAT-RE-5016: Number Theory

MAT-RE-5026**:** Discrete Mathematics

DSE-2 (Choose one)

MAT-RE-6016: Numerical Analysis

MAT-RE-6026: Programming in C

For detailed syllabus follow the link:

https://sites.google.com/a/gauhati.ac.in/syllabus-ug-cbcs/regular/mathematics

CBCS Course Structure for B.Sc. Statistics (Honours) Programme

Semester	Type	Core	AECC	SEC	DSE	GE
	Credits	14×6 = 84	2×4 = 8	2×4 = 8	4×6 = 24	4×6 = 24
I		STA –HC – 1016	ENG– AE – 1014			STA – HG – 1016
		STA – HC – 1026				
II		STA – HC – 2016	ENV – AE – 2014			STA – HG – 2016
		STA – HC – 2026				
III		STA – HC – 3016		STA - SE – 3YY4		STA – HG – 3016
		STA – HC – 3026				
		STA – HC – 3036				
IV		STA – HC – 4016		STA - SE – 4YY4		STA – HG – 4016
		STA – HC – 4026				
		STA – HC – 4036				
V		STT – HC – 5016			STA - HE – 5YY6	
		STA – HC – 5026			STA - HE – 5YY6	
VI		STA – HC – 6016			STA - HE – 6YY6	
		STA – HC – 6026			STA - HE – 6YY6	

Total Credit: 148

Legends

HC: Core Papers for **Honours** **SE:** Skill Enhancement Papers
HE: Discipline Specific Elective Papers for **Honours** **HG:** Generic Elective Papers for **Honours** **AE:** Ability Enhancement Compulsory Course **RC:** Core Papers for **Regular**
RE: Discipline Specific Elective Papers for **Regular** **RG:** Generic Elective for Regular
YY: Serial No. of Paper: Two-digit numerical number (within the Semester)

Directives & Advisory

a) A student majoring (honours) in Statistics MAY take **HG** papers from any available discipline in the college, except Statistics.
b) It is also advisable that a student majoring (honours) in Statistics take at least one **HG** paper from Mathematics.
c) A student majoring (honours) in Statistics MAY choose any four papers out of eight papers mentioned in **HE**.
d) A student majoring (honours) in Statistics MAY choose any two papers out of four papers mentioned in **SE**.
e) The Generic Elective Papers prepared HERE for other disciplines/Departments.

List of Papers

Core Papers

Total Lectures for each Theory papers: 60
Credits: 6 (Theory: 04, Practical/Lab: 02)

Semester	Paper Code	Course name	Paper code for DSE for Regular
I	STA–HC–1016	Descriptive Statistics	
	STA–HC–1026	Calculus	
II	STA–HC–2016	Probability and Probability Distributions	
	STA–HC–2026	Algebra	
III	STA–HC–3016	Sampling Distributions	
	STA–HC–3026	Survey Sampling & Indian Official Statistics	STA-RE-5046
	STA–HC–3036	Mathematical Analysis	
IV	STA–HC–4016	Statistical Inference	
	STA–HC–4026	Linear Models	
	STA–HC–4036	Statistical Quality Control	
V	STA–HC–5016	Stochastic Processes and Queuing Theory	
	STA–HC–5026	Statistical Computing Using C/C++ Programming	
VI	STA–HC–6016	Design of Experiments	STA-RE-6036
	STA–HC-- 6026	Multivariate Analysis and Nonparametric Methods	

Discipline Specific Elective (DSE) Papers for Honours

Total Lectures for each Theory papers: 60 Credits: 6 (Theory: 04, Practical/Lab: 02)

(Any **TWO** papers **MUST** be chosen from given **FOUR** options papers in each Semester)

Semester	Paper Code	Course name	Paper code for DSE for Regular
V	STA – HE – 5016	Operations Research	STA – RE – 5016
	STA – HE – 5026	Time Series Analysis	STA – RE – 5026
	STA – HE – 5036	Survival Analysis and Biostatistics	STA – RE – 5036
	STA – HE – 5046	Financial Statistics	
VI	STA – HE – 6016	Econometrics	STA – RE – 6016
	STA – HE – 6026	Demography and Vital Statistics	STA – RE – 6026
	STA – HE – 6036	Actuarial Statistics	STA – RE – 6046
	STA – HE – 6046	Project Work	

Skill Based (SEC) Papers for Honours

Total Lectures for each Theory papers: 30 Credits: 4 (Theory: 02, Practical/Lab: 02)

(Any **ONE** paper **MUST** be chosen from given **TWO** options papers in each Semester)

Semester	Paper Code	Course name	Paper code for SEC for Regular
III	STA – SE – 3014	Statistical-Data Analysis Using Software Packages	STA – SE – 3014
	STA – SE – 3024	Data Base Management Systems	STA – SE – 4014
IV	STA – SE – 4014	Statistical Data Analysis Using R	STA – SE – 5014
	STA – SE – 4024	Statistical Techniques for Research Methods	STA – SE – 6014

Generic Elective (GE) Papers for Honours

Total Lectures for each Theory papers: 60 Credits: 6 (Theory: 04, Practical/Lab: 02)

Semester	Paper Code	Course name	Paper code for Regular Core (RC) for Regular
I	STA – HG – 1016	Statistical Methods	STA – RC – 1016
II	STA – HG – 2016	Introductory Probability	STA – RC – 2016
III	STA – HG – 3016	Basics of Statistical Inference	STA – RC – 3016
IV	STA – HG – 4016	Applied Statistics	STA – RC – 4016

For detailed syllabus follow the link:
https://sites.google.com/a/gauhati.ac.in/syllabus-ug-cbcs/honours/statistics

CBCS Course Structure for B.Sc. Statistics (Regular) Programme

Semester	Type	Core	AECC	SEC	DSC
	Credits	12×6 = 72	2×4 = 8	2×4 = 8	4×6 = 24
I		STA –RC – 1016 YYY –RC – 1016 ZZZ –RC – 1016	ENG – AE – 1014		
II		STA – RC – 2016 YYY – RC – 2016 ZZZ– RC – 2016	ENV– AE – 2014		
III		STA – RC – 3016 YYY – RC – 3016 ZZZ – RC – 3016		STA - SE – 3XX4	
IV		STA – RC – 4016 YYY – RC – 4016 ZZZ – RC – 4016		STA - SE – 4XX4	
V				STA - SE – 4XX4	STA - RE – 5016 YYY - RE – 5026 ZZZ - RE – 5036
VI				STA - SE – 5XX4	STA - RE – 6016 YYY - RE – 6026 ZZZ - RE – 6036

Total Credit: 110

Legends

RC : Core Papers from Three Disciplines SE : Skill Enhancement Papers
RE : Discipline Specific Elective Papers AE : Ability Enhancement Compulsory Course
X : Semester : Numerical digit for Semester. One of 1, 2, 3, 4, 5, or 6
YY : Serial No of Paper : Two-digit numerical number (within the semester) XXX : Subject 1 (Core / Primary for Honours / Regular)

YYY : Subject 2
ZZZ : Subject 3

Core Course (12 Papers): 4 Courses from each of the 3 disciplines of choice up to 4th Semester. DSC (6 Papers): Two papers from each discipline of choice including paper of interdisciplinary nature.

Regular Core (RC) Papers for Regular
Total Lectures for each Theory papers: 60 Credits: 6 (Theory: 04, Practical/Lab: 02)

Semester	Paper Code	Course name
I	STA – RC – 1016	Statistical Methods
II	STA – RC – 2016	Introductory Probability
III	STA – RC – 3016	Basics of Statistical Inference
IV	STA – RC – 4016	Applied Statistics

Discipline Specific Elective (DSE) Papers for Regular
Total Lectures for each Theory papers: 60 Credits: 6 (Theory: 04, Practical/Lab: 02)

Semester	Paper Code	Course name
V	STA – RE – 5016	Operations Research
	STA – RE – 5026	Time Series Analysis
	STA – RE – 5036	Survival Analysis and Biostatistics
	STA – RE – 5046	Survey Sampling & Indian Official Statistics
VI	STA – RE – 6016	Econometrics
	STA – RE – 6026	Demography and Vital Statistics
	STA – RE – 6036	Design of Experiments
	STA – RE – 6046	Actuarial Statistics

Skill Based (SEC) Papers for Regular
Total Lectures for each Theory papers: 30 Credits: 4 (Theory: 02, Practical/Lab: 02)

Semester	Paper Code	Course name
III	STA – SE – 3014	Statistical-Data Analysis Using Software Packages
IV	STA – SE – 4014	Data Base Management Systems
V	STA – SE – 5014	Statistical Data Analysis Using R
VI	STA – SE – 6014	Statistical Techniques for Research Methods

For detailed syllabus follow the link:
https://sites.google.com/a/gauhati.ac.in/syllabus-ug-cbcs/regular/statistics

CBCS Course Structure for B.Sc. Botany (Honours) Programme

Scheme for Choice Based Credit System in B. Sc. Botany Honours

Semester		**CORE COURSE(14)**	**Ability Enhancement Compulsory Course(AEC)(2)**	**Skill Enhancement Course (SEC) (2)**	**Discipline Specific Elective (DSE) (4)**
I	Core Course I	Phycology and Microbiology	English Communication		
	Core Course II	Biomolecules and Cell Biology			
II	Core Course III	Mycology and Phytopathology	Environmental Studies		
	Core Course IV	Archegoniate			
III	Core Course V	Morphology and Anatomy of Angiosperm		SEC -1	
	Core Course VI	Economic Botany			
	Core Course VII	Genetics			
IV	Core Course VIII	Molecular Biology		SEC -2	
	Core Course IX	Plant Ecology and Phytogeography			
	Core Course X	Plant Systematics			
V	Core Course XI	Reproductive Biology of Angiosperms			DSE-1
	Core Course XII	Plant Physiology			DSE-2
VI	Core Course XIII	Plant Metabolism			DSE -3
	Core Course XIV	Plant Biotechnology			DSE-4

Course Structure for CBCS in B. Sc. Botany Honours as per requirement of UGC

SEMESTER	COURSE OPTED	COURSE NAME	Credits
I	**ENG-AE-1014**	English communications	4
	BOT-HC-1016	Phycology and Microbiology	4
	BOT-HC-1016 (**Practical)**	Phycology and Microbiology	2
	BOT-HC-1026	Biomolecules and Cell Biology	4
	BOT-HC-1026 (**Practical)**	Biomolecules and Cell Biology- Practical	2
II	**ENV-AE-2014**	Environmental Studies	4
	BOT-HC-2016	Mycology and Phytopathology	4
	BOT-HC-2016 **(Practical)**	Mycology and Phytopathology- Practical	2
	BOT-HC-2026	Archegoniate	4
	BOT-HC-2026 **(Practical)**	Archegoniate- Practical	2
III	BOT-HC-3016	Morphology Anatomy and of Angiosperm	4
	BOT-HC-3016 (**Practical)**	Morphology Anatomy and of Angiosperm –Practical	2
	BOT-HC-3026	Economic Botany	4
	BOT-HC-3026 (**Practical)**	Economic Botany-Practical	2
	BOT-HC-3036	Genetics	4
	BOT-HC-3036 (**Practical)**	Genetics- Practical	2
	1. BOT-SE-3014 2. BOT-SE-3024	SEC-1 (any one) 1. Biofertilizers 2. Herbal Technology	4
IV	BOT-HC-4016	Molecular Biology	4
	BOT-HC-4016 (**Practical)**	Molecular Biology- Practical	2
	BOT-HC-4026	Plant Ecology and Phytogeography	4
	BOT-HC-4026 (**Practical)**	Plant Ecology and Phytogeography – Practical	2
	BOT-HC-4036	Plant Systematics	4
	BOT-HC-4036 (**Practical)**	Plant Systematics Practical	2
	1. BOT-SE-4014 2. BOT-SE-4024 3. BOT-SE-4034	SEC-II (any one) 1. Nursery and Gardening 2. Floriculture 3. Intellectual Property Rights	4
	BOT-HC-5016	Reproductive Biology of Angiosperms	4
	BOT-HC-5016 (**Practical)**	Reproductive Biology of Angiosperm – Practical	2

V	BOT-HC-5026	Plant Physiology	4
	BOT-HC-5026 (**Practical)**	Plant Physiology- Practical	2
	BOT-HE-5016	DSE-1 Natural Resource Management	4
	BOT-HE-5016 (**Practical)**	DSE-1 Practical Natural Resource Management – Practical	2
	BOT-HE-5026	DSE-2 Horticultural Practices and Post-Harvest Technology	4
	BOT-HE-5026 **(Practical)**	DSE-2 Practical Horticultural Practices and Post-Harvest Technology-Practical	2
VI	BOT-HC-6016	Plant Metabolism	4
	BOT-HC-6016 (**Practical)**	Plant Metabolism- Practical	2
	BOT-HC-6026	Plant Biotechnology	4
	BOT-HC-6026 (**Practical)**	Plant Biotechnology- Practical	2
	BOT-HE-6016	DSE-3 Industrial and Environmental Microbiology	4
	BOT-HE-6016 (**Practical)**	DSE-3 Industrial and Environmental Microbiology-Practical	2
	Discipline Centric Elective-4 (Theory & practical / Project Work)	Either 1 or 2 below	
	1.BOT-HE-6026	DSE-4 1.Analytical Techniques in Plant Sciences	4
	1.BOT-HE-6026 (**Practical)**	DSE-4 1.Analytical Techniques in Plant Sciences-Practical	2
	2.BOT-HE-6036	DSE-4 2. Project Work/ Dissertation	6
Total Credits in B. Sc. Botany Honours: 116			

List of Papers

Core Papers

1 BOT-HC-1016 : Phycology and Microbiology
2 BOT-HC-1026 : Biomolecules and Cell Biology
3 BOT-HC-2016 : Mycology and Phytopathology
4 BOT-HC-2026 : Archegoniate
5 BOT-HC-3016 : Morphology and Anatomy of Angiosperm
6 BOT-HC-3026 : Economic Botany

7	BOT-HC-3036	: Genetics
8	BOT-HC-4016	: Molecular Biology
9	BOT-HC-4026	: Plant Ecology and Phytogeography
10	BOT-HC-4036	: Plant Systematics
11	BOT-HC-5016	: Reproductive Biology of Angiosperms
12	BOT-HC-5026	: Plant Physiology
13	BOT-HC-6016	: Plant Metabolism
14	BOT-HC-6026	: Plant Biotechnology

Discipline Specific Elective (DSE) Papers

1	BOT-HE-5016	: Natural Resource Management
2	BOT-HE-5026	: Horticultural Practices and Post-Harvest Technology
3	BOT-HE-6016	: Industrial and Environmental Microbiology
4	BOT-HE-6026	: Analytical Techniques in Plant Sciences
5	BOT-HE-6036	: Project work/Dissertation

Generic Elective (GE)

1	BOT-HG-1016	: Biodiversity (Microbes, Algae, Fungi and Archegoniate)
2	BOT-HG-2016	: Plant Ecology and Taxonomy
3	BOT-HG-3016	: Plant Physiology and Metabolism
4	BOT-HG-3026	: Environmental Biotechnology
5	BOT-HG-4016	: Plant Anatomy and Embryology
6	BOT-HG-4026	: Economic Botany and Plant Biotechnology

Ability Enhancement Course Compulsory

1 ENG-AE-1014 : English/MIL communication

2 ENV-AE-2014: Environmental Studies

Skill Enhancement Paper

1	BOT-SE-3014	: Biofertilizers (SEC-I)
2	BOT-SE-3024	: Herbal Technology (SEC-I)
3	BOT-SE-4014	: Nursery and Gardening (SEC-II)
4	BOT-SE-4024	: Floriculture (SEC-II)
5	BOT-SE-4034	: Intellectual Property Rights (SEC-II)

For detailed syllabus follow the link:
https://sites.google.com/a/gauhati.ac.in/syllabus-ug-cbcs/honours/botany-h

CBCS Course Structure for B.Sc. Botany (Regular) Programme

Scheme for Choice Based Credit System in B. Sc. with Botany (Regular)

	DISCIPLINE CORE COURSE(12)	**Ability Enhancement Compulsory Course (AECC) (2)**	**Skill Enhancement Course (SEC)** (2)	**Discipline Specific Elective DSE (6)**
I	Discipine-1 Botany Paper I: Biodiversity (Microbes, Algae, Fungi and Archegoniate)	English/MIL Communication		
II	Discipine-1 Botany Paper II: Plant Ecology and Taxonomy	Environmental Studies		
III	Discipine-1 Botany Paper III: Plant Anatomy and Embryology		SEC-1	
IV	Discipine-1 Botany		SEC -2	
	Paper IV: PlantPhysiology andMetabolism			
V			SEC -3	DSE-Botany Paper I
VI			SEC -4	DSE-Botany Paper II

Course Structure for CBCS in B. Sc. with Botany (Regular) as per requirement of UGC

SEMESTER	**COURSE OPTED**	**COURSE NAME**	**Credits**
I	ENG-AE 1014	English/MIL communications	4
	BOT-RC-1016	Biodiversity (Microbes, Algae, Fungi and Archegoniate)	4
	BOT-RC-1016 (Practical)	Biodiversity (Microbes, Algae, Fungi and Archegoniate) –Practical	2
II	ENV-AE 2014	Environmental Studies	4
	BOT-RC-2016	Plant Ecology and Taxonomy	4
	BOT-RC-2016 (Practical)	Plant Ecology and Taxonomy -Practical	2
III	BOT-RC-3016	Plant Physiology and Metabolism	4
	BOT-RC-3016 (Practical)	Plant Physiology and Metabolism –Practical	2

	1. BOT- SE-3014 2. BOT-SE-3024	RSE-1 (Any one) 1.Biofertilizers 2.Herbal Technology	4
IV	BOT-RC-4016	Plant Anatomy and Embryology	4
	BOT-RC-4016(Practical)	Plant Anatomy and Embryology-Practical	2
	1. BOT-SE-4014 2. BOT-SE-4024 3. BOT-SE-4034	RSE -2 (Any one) 1.Nursery and Gardening 2. Floriculture 3. Intellectual Property Right	4
V	1. BOT-SE-5014 2. BOT-SE-5024	RSE -3 Any one) 1.Medicinal Botany 2. Plant Diversity and Human Welfare	4
	1. BOT-RE-5016 2. BOT-RE-5026 3. BOT-RE-5036	RDS- I (any one) 1. Cell and Molecular Biology 2. Economic Botany and Biotechnology 3. Genetics and Plant Breeding	4
	RDS -1(Practical)	RDS-Botany Paper I –Practical	2
VI	1. BOT-SE-6014 2. BOT-SE-6024	RSE -4 (Any one) 1. Ethnobotany 2. Mushroom Culture Technology	2
	RDS -Either of 1 or 2 below:		
	1. BOT-RE-6016	RDS-2 (Any one) 1. Analytical Techniques in PlantSciences	4
	1. BOT-RE-6016 (Practical)	2. Analytical Techniques in Plant Sciences - Practical	2
	2. BOT-RE-6026	2. Dissertation	6
Total Credits in Botany			**52**

Legends:
RC: Core Papers
RE: Discipline Specific Elective Papers SE: Skill Enhancement Papers

List of Papers with BSc. Botany (Regular) under CBCS
Core Papers

1	BOT-RC-1016	: Biodiversity (Microbes, Algae, Fungi and Archegoniate)
2	BOT-RC-2016	: Plant Ecology and Taxonomy
3	BOT-RC-3016	: Plant Physiology and Metabolism
4	BOT-RC-4016	: Plant Anatomy and Embryology

Discipline Specific Elective Papers (Any two)

1	BOT-RE-5016	: Cell and Molecular Biology
2	BOT-RE-5026	: Economic Botany and Biotechnology
3	BOT-RE-5036	: Genetics and Plant Breeding
4	BOT-RE-6016	: Analytical Techniques in Plant Sciences
5	BOT-RE-6026	: Dissertation

Ability Enhancement Compulsory Courses

1	ENG-AE-1014	: English/MIL
2	ENV-AE-2014	: Environmental Studies

Skill Enhancement Papers (Any four)

1	BOT-SE-3014	: Biofertilizers
2	BOT-SE-3024	: Herbal Technology
3	BOT-SE-4014	: Nursery and Gardening
4	BOT-SE-4024	: Floriculture
5	BOT-SE-4034	: Intellectual Property Right
6	BOT-SE-5014	: Medicinal Botany
7	BOT-SE-5024	: Plant Diversity and Human Welfare
8	BOT-SE-6014	: Ethnobotany
9	BOT-SE-6024	: Mushroom Culture Techniques

For detailed syllabus follow the link:
https://sites.google.com/a/gauhati.ac.in/syllabus-ug-cbcs/regular/botany

CBCS Course Structure for B.Sc. Home Science (Honours) Programme

Type	Core	AEC	SEC	DSE	Gen
Credits	14 x 6 = 84	2 x 4 = 8	2 x 4 = 8	4 x 6 = 24	4 x 6 =24
I	HSC-HC-1016	ENG-AE-1014			HSC-HG-1XX6
	HSC-HC-1026				
II	HSC-HC-2016	ENV-AE-2014			HSC-HG-2XX6
	HSC-HC-2026				
III	HSC-HC-3016		HSC-SE-3XX4		HSC-HG-3XX6
	HSC-HC-3026				
	HSC-HC-3036				
IV	HSC-HC-4016		HSC-SE-4XX4		HSC-HG-4XX6
	HSC-HC-4026				
	HSC-HC-4036				
V	HSC-HC-5016			HSC-HE-5XX6	
	HSC-HC-5026			HSC-HE-5YY6	
VI	HSC-HC-6016			HSC-HE-6XX6	
	HSC-HC-6026			HSC-HE-6YY6	

CORE COURSES (14 Courses) Total Credits – 84
(6 credits each Theory 4 credits + Practical 2 credits =6)

1. HSC-HC-1016: Human Development I: The Childhood Years Theory 4 credits + Practical 2 credits
2. HSC-HC-1026: Food and Nutrition Theory 4 credits + Practical 2 credits
3. HSC-HC-2016: Dynamics of Communication and Extension Theory 4 credits + Practical 2 credits
4. HSC-HC-2026: Resource Management Theory 4 credits + Practical 2 credits
5. HSC-HC-3016: Introduction to Textiles Theory 4 credits + Practical 2 credits
6. HSC-HC-3026: Communication Systems and Mass Media Theory 4 credits + Practical 2 credits
7. HSC-HC-3036: Personal Finance & Consumer Studies Theory 4 credits + Practical 2 credits
8. HSC-HC-4016: Human Development II: Development in Adolescence and Adulthood Theory 4 credits + Practical 2 credits
9. HSC-HC-4026: Nutrition: A Life Cycle Approach Theory 4 credits + Practical 2 credits
10. HSC-HC-4036: Fashion Design Concepts Theory 4 credits + Practical 2 credits
11. HSC-HC-5016: Life Sciences Theory 4 credits + Practical 2 credits
12. HSC-HC-5026: Physical Science Theory 4 credits + Practical 2 credits
13. HSC-HC-6016: Research Methodology in Home Science Theory 4 credits + Practical 2 credits
14. HSC-HC-6026: Socio Economic Environment Theory 4 credits + Practical 2 credits

DISCIPLINE SPECIFIC ELECTIVE (4 Courses) Total Credits – 24 (6 Credits each –Theory 4 credits + Practical 2 credits =2)

1. HSC-HE-5016: Food Science Theory 4 credits + Practical 2 credits
2. HSC-HE-5026: Indian Textile Heritage Theory 4 credits + Practical 2 credits

3. HSC-HE-5036: Child Rights and Gender Justice Theory 4 credits + Practical 2 credits
4. HSC-HE-5046: Basics of Interior Design and Hospitality Management Theory 4 credits + Practical 2 credits
5. HSC-HE-5056: Extension for Development Theory 4 credits + Practical 2 credits
6. HSC-HE-6016: Therapeutic Nutrition Theory 4 credits + Practical 2 credits
7. HSC-HE-6026: Apparel Production Theory 4 credits + Practical 2 credits
8. HSC-HE-6036: Childhood Disability and Social Action Theory 4 credits + Practical 2 credits
9. HSC-HE-6046: Interior Design & Decoration Theory 4 credits + Practical 2 credits
10. HSC-HE-6056: Entrepreneurship Development & Enterprise Management Theory 4 credits + Practical 2 credits

SKILL ENHANCEMENT COURSES (2 Courses) Total Credit- 8

1. HSC-SE-3014: Early Childhood Care and Development Theory 2 Credit + Practical 2 credits
2. HSC-SE-3024: Surface Ornamentation Practical 4 credits
3. HSC-SE-3034: Maternal and Child Nutrition Theory 4 credits
4. HSC-SE-4014: Information, Education and Communication Material for Development Theory 2 Credit + Practical 2 credits
5. HSC-SE-4024: Bakery Science Practical 4 Credit
6. HSC-SE-4034: Pattern making and draping Theory 1 Credit, Practical 3 Credit
7. HSC-SE-5014: Understanding Psychology Theory 4 Credit
8. HSC-SE-5024: Textile Processing Theory 1 Credit + Practical 3 Credit
9. HSC-SE-6014: NGO Management & CSR Theory 4 credits
10. HCS-SE-6124: Commercial clothing Theory 1 Credit, Practical 3 Credit

GENERIC ELECTIVES (For other disciplines)

1. HSC-HG-1016 : Child Rights and Social Action Theory 5 credits + 1 Tutorial
2. HSC-HG-1026 : Media, Culture and Society Theory 5 credits + 1 Tutorial
3. HSC-HG-2016 : Human Nutrition Theory 4 credits + 2 Practical credits
4. HSC-HG-2026 : Appreciation of Textile Crafts Theory 4 credits + 2 Practical credits
5. HSC-HG-3016 : Adolescent Relationships Theory 4 credits + 2 Practical
6. HSC-HG-3026 : Current Concerns in Public Health Nutrition Theory 5 credits + 1 Tutorial
7. HSC-HG-4016 : Entrepreneurship and Enterprise Management Theory 4 credits + 2 Practical credits
8. HSC-HG-4026 : Interior Design Theory 4 credits + 2 Practical credits.

For detailed syllabus follow the link:
https://sites.google.com/a/gauhati.ac.in/syllabus-ug-cbcs/honours/homescience

CBCS Course Structure for B.Sc. Home Science (Regular) Programme

Semester No.	Core Course	Ability Enhancement Compulsory Course (AEDSC)	Skill Enhancement Course (SEC)	Discipline Specific Elective (DSE)	Generic Electives (GE) (For BA Students)
I	**HSC-RC-1016**: Fundamentals of nutrition and Food Science	English/MIL communication			
II	**HSC-RC-2016** : Fundamental of Textile	Environmental Studies			
III	**HSC-RC-3016** : Resource Management		SEC 1		
IV	**HSC-RC-4016** : Life Span Development and Extension Education		SEC 2		
V			SEC 3	DSE 1A	GE 1
VI			SEC 4	DSE I B	GE 2

DISCIPLINE SPECIFIC CORE COURSES (DSC)

1. **HSC-RC-1016** : **Fundamentals of Nutrition and Food Science** Theory 4 Credits +Practical 2 Credit
2. **HSC-RC-2016** : **Fundamentals of Textiles** Theory 4 Credits +Practical 2 Credit
3. **HSC-RC-3016** : **Resource Management** Theory 4 Credits +Practical 2 Credit
4. **HSC-RC-4016** : **Life Span Development and Extension Education** Theory 4 Credits +Practical 2 Credit.

DISCIPLINE SPECIFIC ELECTIVE (4 Courses) Total Credits – 24 (6 Credits each –Theory 4 credits + Practical 2 credits =2)

1: HSC-RE-5016: Food Science Theory 4 credits + Practical 2 credits
2: HSC-RE-5026: Indian Textile Heritage Theory 4 credits + Practical 2 credits
3: HSC-RE-5036: Child Rights and Gender Justice Theory 4 credits + Practical 2 credits
4: HSC-RE-5046: Basics of Interior Design and Hospitality Management Theory 4 credits + Practical 2 credits
5: HSC-RE-5056: Extension for Development Theory 4 credits + Practical 2 credits
6: HSC-RE-6016: Therapeutic Nutrition Theory 4 credits + Practical 2 credits
7: HSC-RE-6026: Apparel Production Theory 4 credits + Practical 2 credits
8: HSC-RE-6036: Childhood Disability and Social Action Theory 4 credits + Practical 2 credits
9: HSC-RE-6046: Interior Design & Decoration Theory 4 credits + Practical 2 credits
10: HSC-RE-6056: Entrepreneurship Development & Enterprise Management Theory 4 credits + Practical 2 credits

SKILL ENHANCEMENT COURSES (2 Courses) Total Credit- 8

1. **HSC-SE-3014: Early Childhood Care and Development** Theory 2 Credit + Practical 2 credits
2. **HSC-SE-3024: Surface Ornamentation** Practical 4 credits
3. **HSC-SE-3034: Maternal and Child Nutrition** Theory 4 credits
4. **HSC-SE-4014: Information, Education and Communication Material for Development** Theory 2 Credit + Practical 2 credits
5. **HSC-SE-4024: Bakery Science** Practical 4 Credit
6. **HSC-SE-4034: Pattern making and draping** Theory 1 Credit, Practical 3 Credit
7. **HSC-SE-5014: Understanding Psychology** Theory 4 Credit
8. **HSC-SE-5024: Textile Processing** Theory 1 Credit + Practical 3 Credit
9. **HSC-SE-6014: NGO Management & CSR** Theory 4 credits
10. **HCS-SE-6124: Commercial clothing** Theory 1 Credit, Practical 3 Credit

GENERIC ELECTIVES (For other disciplines)

1. **HSC-RG-5016 : Child Rights and Social Action** Theory 5 credits + 1 Tutorial
2. **HSC-RG-5026 : Media, Culture and Society** Theory 5 credits + 1 Tutorial
3. **HSC-RG-5036 : Adolescent Relationships** Theory 4 credits + 2 Practical
4. **HSC-RG-5046 : Current Concerns in Public Health Nutrition** Theory 5 credits + 1 Tutorial
5. **HSC-RG-6016 : Human Nutrition** Theory 4 credits + 2 Practical credits
6. **HSC-RG-6026 : Appreciation of Textile Crafts** Theory 4 credits + 2 Practical credits
7. **HSC-RG-6036 : Entrepreneurship and Enterprise Management** Theory 4 credits + 2 Practical credits
8. **HSC-RG-6046 : Interior Design** Theory 4 credits + 2 Practical credits

For detailed syllabus follow the link:
https://sites.google.com/a/gauhati.ac.in/syllabus-ug-cbcs/regular/homescience