### Khalsa College Amritsar

### PG Department of Commerce and Business Administration

#### Program Outcomes, Program Specific Outcomes and Course Outcomes

The following programs have been offered at different levels by the department:

- 1. Research Degree Courses: M.Phil. (One Year, Two Semesters)
- 2. Post Graduate Degree Courses:

M.Com. (Two Year, Four Semesters) 3. Under Graduate Degree Courses: B.Com. (Hons) (Three Year, Six Semesters) **B.**Com. (Pass) (Three Year, Six Semesters) **BBA** (Three Year, Six Semesters) **PGDFS** (One Year, Two Semesters) DRM (One Year, Two Semesters) DCA/CCCA (One Year, Two Semesters)

#### **Program outcomes**

4. Diploma Courses:

The aforesaid degree and diploma courses aim to provide the students with the knowledge and practical training regarding banking, insurance, retail, marketing, computerised accounting etc., tools of analysis and skills to understand and participate in the modern business and economic world. The specific program outcomes are as follows:

Specific Program	Outcome
M.Phil.	The Students are given research guidance
Supervised and the state of the	which helps them in major research projects
In terms out they say in he many description	during Ph.D. They are acquainted with
and a start of the second start	various updated research tools and
	techniques. There are provisions to prepare
scenario more second and accelerate	Dissertation to instill some primary concepts
	of academic research in field of finance,
	marketing and HR.
M.Com.	The students are provided with the practical
	exposure in finance, marketing, HRM and
	taxation that would equip the student to face
	the modern day challenges in Commerce and
	Business. Moreover, the Job oriented skills
	are taught which ensure that the students are
	fit for every challenging situation. There are
	some requirements to test in the form of

	preparation of Assignment /Seminar Report/
and the second second	Term Paper to impart knowledge about
PG thep a number of a los	primary concepts of different areas among
- Kirolsti	the post graduate students.
B.Com. (Pass and Hons.)	Both degree courses provide expertise
	knowledge to the students in various fields of
	business like business and company law,
There we are the first of the	management, marketing and income tax.
	Workshops for e-filing of income tax and
Team and a second s	GST returns are organised to help them in e-
and the second se	filing of returns.
BBA	The students have been imparted knowledge
	regarding set up of new entrepreneurial firms
State, It Shalling Proprietors Child, and the	and ability to recognize the role of business
	persons, entrepreneur, manager and
	consultant.
PGDFS, DRM and DCA/ CCCA	These Diplomas help in learning new
	improved technological upgradation in
	banking and finance, retail sector and
	computerised accounting world.
	Ý

#### **Course Outcomes:**

The current syllabus of various courses is well chosen from the whole corpus of business world to represent different events from different angles of business activities. They are not meant just to make the students familiar with the prevailing areas of business but also to open out new perspectives, the student may acquire knowledge of the changing nature of business environment of the changing times. Job oriented skills among students have been developed to ensure that they are fit for every challenging situation. The present syllabi aim to provide expertise in ways to contribute towards the development of new practices and procedures of accounting, taxation, banking and insurance etc.

Faculty of Ards on Humonstres.

Programmed offered. 1. B. A. 2. B. A. Socral Scrences. S. Pragramme Outcome # Basse vodergraduate Programae for students. # Baire duglification for Moster's Degrees in Aats & Humansties. Social, economic, political and cutural Environment. # Develops vorrous socral - psychologrcal skills. # Knowledge and amereness about various socio-economic issues and problems. # Provides inter-disciplanary focus. # Development of social and human values. Helfe in the preparation of roorors competative # crane.

P. G. Department of Political Science on Public Administration

I To pursue Research (M. Phil, P. Nd) 4.) New Avenues. # Employent in Teaching. # UPSC, PCS and alter competative Exams.

2. B. A. (Political Science)

# P. G. Dept. of Economics

P.G. Dept. of Economics Afers following programmes: 1) B.Sc. Economics 2) M.A. Economics. It also offers Economics as a course in B.A. > These courses help in cultivating problem solving, analytical, communication and persuasion skills among students that are councial for success in today's job market. I The wide range of skills developed trough studying Economics at graduation and post guaduation levels, opens up be diverse career opportunitées in 2. Finance and investment companies 3. Accounting forms 4. Industries 5. Reserve Bank of India 7. ministry of Foreign Affairs and Trade 8. ministry of commerce

9. Economic Research and consultancy firms 10. Local government and planning authorities

11. IAS, PCS 12. Teaching jobs in Universities + other educational insti--tudions 12: Indian Economic Services

# Khalsa College Amritsar PG Department of History

#### **Courses offered**

- 1) B.A. and B.A. Social Sciences (Honours)
- 2) M.A. History

#### Outcome of the Courses at Graduate Level:

- The course provides knowledge of history of India and the world and prepares them for various competitive examinations opening various avenues of employment.
- 2) Inspires them to pursue higher studies in the subject.

When the an Pot first her Level

#### **Outcome of the Course at Post-Graduate Level:**

- 1) The course provides knowledge of different aspects of human life in past for understanding the present better and guidelines for future.
- 2) Develops research aptitude among the students and prepares them for pursuing careers in teaching and research.
- 3) Prepares students for various state and national level competitive examinations to get employment at different levels of administration.

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Department of Socialogy Out Comes of Bociology at Graduate Courses (13. A, BPT, and English Hons), <u>Long Tearns</u> Outlanes 1 Students become familiare with Social Structure. 2 They become able to discern Social interactions and make sense of social, historical, Political and cultural Change. 3 Become aware of Contempory Issues and Challenges 4 Sh Critical Thinking is Strengthened.

# Specific Out Comes

J Get acquaintence with classical and Contemporary Society . Sociological theories and Concepts 2 familarity with development issues 3 Through projects, Students are trained in research. 4 Perpares students for higher studies 4 Perpares students for higher studies Competition 5 Helps Students to appear in various competition exams

#### KHALSA COLLEGE AMRITSAR DEPARTMENT OF PSYCHOLOGY COURSE OUTCOMES OF PSYCHOLOGY AS A SUBJECT IN BACHELOR OF ARTS

Course of Psychology as a subject in B.A. has been designed to fulfill the following outcomes:

- Acquisition of both theoretical and practical knowledge of basic concepts of Psychology. Students will be able to describe key concepts, principles and overarching themes in Psychology.
- To develop scientific inquiry and critical thinking among students. Students will be able to engage in innovative and integrative thinking and problem solving for research purposes.
- Psychology is considered as a best scoring subject in IAS-PCS.
- To prepare students for opting Masters in Psychology which will provide them a promising career as a counselor in hospitals, CBSE schools and addiction centers.

Bruch 16/12/2019

#### KHALSA COLLEGE AMRITSAR DEPARTMENT OF GEOGRAPHY

COURSE OUTCOMES OF GEOGRAPHY AS A SUBJECT IN BACHELOR OF ARTS

- Geography is an important link between the natural and social sciences.
- The curriculum focus on understanding and resolving issues about environment and sustainable development.
- Geography is considered as the best scoring subject in IAS-PCS.
- As pupils study geography, they encounter different societies and cultures.
- Geography help to understand basic physical systems that affect everyday life.
- To provide insight for wise management decisions about how the planet's resources should be used.
- To become a better global citizen.

-d 16/12/2019

#### **KHALSA COLLEGE AMRITSAR**

P.G. Department of Fine Arts Session:-2020-21 Course Detail for B.A. and M.A. Fine Arts

**B.A.(Fine Arts)** 

#### **Bachelor of Arts in Fine Arts**

**Duration**: 3 Years

Level : Graduation

Type : Degree

**Eligibility** : 10+2

#### **B.A. fine Arts Eligibility**

Aspiring students should have passed 10+2 with 50% of marks from a recognised school board.

B.A. Fine Arts is an undergraduate Fine Arts course. Fine art or fine arts comprise at forms developed mainly for aesthetics or concept rather than practical application. Art is often a synonym for fine art, as employed in the term 'art gallery'. This Fine Arts course enables students to learn the whole concept of pipe-lining of production in 2D and 3D animation with the incorporation of in-depth traditional concepts of drawing and paintings. Bachelor of Arts in Fine Arts is of three years duration course and the syllabus is divided into six semesters.

#### **B.A. Fine Arts Syllabus**

**B.A. Semester I** 

Paper A: History of Indian Painting (Theory)

**Paper B**: Still Life (Practical)

Paper C: Letter Writing (Practical)

#### **B.A. Semester II**

**Paper A**: History of Indian Sculpture (Theory)

Paper B: Still Life (Practical)

Paper C: Poster Making (Practical)

#### **B.A. Semester III**

Paper A: History of Indian Sculpture (Theory)Paper B: Poster Making (Practical)Paper C:Head Study (Practical)

#### **B.A. Semester IV**

Paper A: History of Indian Miniature Painting (Theory)Paper B: Head Study (Practical)Paper C: Design 2D&3D (Practical)

#### **B.A. Semester V**

Paper A: History of modern Movement in Europe (Theory)Paper B: Landscape (Practical)Paper C: Full Life Drawing (Practical)

#### **B.A. Semester VI**

Paper A: History of Indian Paintings (Modern Period) (Theory)Paper B: Landscape (Practical)Paper C: Full Life Drawing (Practical)

#### How is B.A. Fine Arts Course Beneficial ?

There are many career options for the degree holders as they can go for competition, studios, and galleries, to display outstanding talent, creativity, and style.

Among craft and fine artists, talented individuals who have also good options as mastery of artistic techniques and skills.

Another area of jobs in Multimedia arts and animation they have better job opportunities than other artists but along with stiff competition.

After passing the course, they can also go for further higher studies in the subjects of their interest in graduation.

#### **B.A. Fine Arts Course Options.**

- To organizes exhibition and workshops.
- Prepare students for Employment in different fields as :
- Curator
- Cartoonist
- Set Designer
- Production Houses
- Art Teacher
- Decoration Companies
- Event Management Companies
- To encourage students to work as free lancers.
- To establish an Art Gallery in the College.
- To improve teaching by using multimedia and internet etc.

M.A.(Fine Arts) Master of Fine Arts Duration : 2 Years Level : Post Graduation Type : Degree Eligibility : Graduation

#### M.A. fine Arts Eligibility

The candidates should complete their B.A. degree with 50% marks under any recognized University or College.

M.A. Fine Arts is delivered through individual studio practice, lectures, seminars, master classes and one-to one tutorials. The duration of M.A. In fine Arts is mostly of two academic years but it may vary from institute to institute. M.A. is very valuable in the field of arts, culture and other heritages of the country.

#### M.A. Fine Arts Syllabus

M.A. Semester I

Paper I: Aesthetics and Principles of Arts Appreciation (Theory)

Paper II: History of Indian Art (Theory)

Paper III: (Option A) Landscape Painting (Practical)

(Option B) Graphic Arts (Practical)

Paper IV: Composition (Practical)

#### M.A. Semester II

Paper I: Aesthetics and Principles of Arts Appreciation (Theory)

Paper II: History of Indian Art (Theory)

Paper III: (Option A) Landscape Painting (Practical)

(Option B) Graphic Arts (Practical)

**Paper-IV**: Composition (Practical)

#### M.A. Semester III

Paper I: History of European Art (Theory)

Paper II: Modern Movements in Art in Europe, U.S.A. and India (Theory)

Paper III: Life Drawing Painting (Practical)

Paper IV (Option A) Composition (Practical)

(Option B) Graphics (Practical)

#### M.A. Semester IV

Paper I: History of European Art (Theory)

Paper II: Modern Movements in Art in Europe, U.S.A. and Indian Contemporary Artist(Theory)

Paper III: Life Drawing Painting (Practical)

Paper IV (Option A) Composition (Practical)

(Option B) Graphics (Practical)

#### How is B.A. Fine Arts Course Beneficial ?

This degree course enables the students to go for Fine Arts programmes both at state and center level such as the creative arts that includes advertising, crafts, cultural, heritage, design and visual arts.

Second it paves the way for higher degree programmes in respective, e.g. M. Phil. degree, etc.

Third other place where candidates can find jobs; these include artist in residence, developing art-related activities in school, hospitals and prisons or bidding for fixed- term funding to carry out a project or commission.

#### **M.A. Fine Arts Employment Areas**

Theatres Animation Companies Publishing Houses Fashion Houses Education institution Advertising Companies Television Industry Art Studios& Art Consultant Art Criticism Comics etc.

#### M.A. Fine Arts Job Types

Art Teacher Art Director Graphic Artist\Designer Creative Director Drawing Teacher Art Critic Senior Graphic Designer Animator Art Restorer Assist. Lecturer Academic Research Editor Art Galleries etc.

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### Department of Physical Education

#### **Optional subject Physical education in Semester 1 to 6**

- 1. Know About the Origin of Education and Its Relationships With Physical Education from the Ancient Time.
- 2. The student learns the psychological, physiological and sociological aspects to apply to improve the performance in sports. Such knowledge helps to create a strong foundation to engage human subject of all ages, sex, and ability, hence to gain knowledge and learn about Culture and Socialization in relation to sports.
- 3. The Students will gain knowledge of Diet & constitution, components of nutrition, water, natural diet, and balanced diet.
- 4. The students will develop the understanding and knowledge of Concept of Olympics movement, the ancient Olympic Games and the Modern Olympic Games. It also helps to know about the aims and symbols of the Olympic movement and International Olympic Committee and other International Tournament like Asian Games, Commonwealth games.
- 5. In this course the students will be able to understand the importance of health, physical fitness and positive life style related challenges faced by the members of the society.
- 6. Knowledge of how to prevention, Diagnostic, remedies of Common Diseases and injuries.
- 7. To educate the students about basic anatomy and physical structure, its functioning, rehabilitation process, good and bad posture etc.
- 8. To create awareness about doping and its bad effects to the students.
- 9. The Course is so designed that it meets all the demands of the society in disseminating the knowledge of Behavior of a sportspersons/common man.
- 10. It also helps to understand about therapeutic value with Yogasanas for rehabilitation and strengthening of the muscles, to perform yoga its asana and its benefits on body.
- 11. Importance of recreation in our Life.
- 12. The students are provided with various choices in the skill enhancement knowledge which are directly related to improve Sports Performance.

### Department of Physical Education

#### Physical education in B.A. Social Science Semester 2

- 1. In this course the students will be able to understand the importance of health, physical fitness and positive life style related challenges faced by the members of the society.
- 2. The students will develop the understanding and knowledge of Concept of Olympics movement, the ancient Olympic Games and the Modern Olympic Games. It also helps to know about the aims and symbols of the Olympic movement and International Olympic Committee and other International Tournament like Asian Games, Commonwealth games.
- 3. The student learns the psychological, physiological and sociological aspects to apply to improve the performance in sports. Such knowledge helps to create a strong foundation to engage human subject of all ages, sex, and ability, hence to gain knowledge and learn about Culture and Socialization in relation to sports.
- 4. In this course the students will be able to understand the importance of health, physical fitness and positive life style related challenges faced by the members of the society.

### Department of Physical Education

#### Diploma in Gatka Semester 1 to 2

- 1. To promote religious culture among students so that they may know the rich cultural heritage of this martial art.
- 2. The student learns the psychological, physiological and sociological aspects to apply to improve the performance in sports. Such knowledge helps to create a strong foundation to engage human subject of all ages, sex, and ability, hence to gain knowledge and learn about Culture and Socialization in relation to sports especially related to Gatka.
- 3. To keep this ancient martial art alive in the society so that the coming generations may know the heritage value and legacy of their ancestors.
- 4. To acquire knowledge and usage of various ancient and traditional weapons for selfdefense.

Programme Outcomes Science faculty of Khalsa College Amritsar is offering following undergraduate and postgraduate programmes: Undergraduate Programmes:

S.No.	Programme	No. of	No. of	Pass	University
		student	student	percentage	Pass
		appeared in	passed in		Percentage
		Exanimation	Exanimation		
		in session	in session		
		2018-19	2018-19		
1.	B.Sc.(Non-medical) I	38	25	65.79	41.8
2.	B.Sc.(Non-medical)II	34	27	79.41	45.38
3.	B.Sc.(Non-medical)III	46	21	45.65	56.04
4.	B.Sc.(Non-medical)IV	45	36	80	68.87
5.	B.Sc.(Non-medical)V	68	65	95.59	71.28
6.	B.Sc.(Non-medical) Sem VI	57	52	91.23	58.91
7.	B.Sc.(Comp. Sci) Sem I	22	15	68.18	41.8
8.	B.Sc.(Comp. Sci) Sem II	20	15	75.0	45.38
9.	B.Sc.(Comp. Sci) Sem III	37	27	72.97	56.04
10.	B.Sc.(Comp. Sci) Sem IV	37	32	86.49	68.67
11.	B.Sc.(Comp. Sci) Sem V	27	26	96.30	71.28
12.	B.Sc.(Comp. Sci) Sem VI	23	22	95.65	58.91
13.	B.Sc.(Medical)Sem I	77	40	51.95	41.8
14.	B.Sc.(Medical)Sem II	72	55	76.39	45.38
15.	B.Sc.(Medical)Sem III	74	50	67.57	56.04
16.	B.Sc.(Medical)Sem IV	72	48	66.67	68.87
17.	B.Sc.(Medical)Sem V	120	109	90.83	71.28
18.	B.Sc.(Medical)Sem VI	104	96	92.31	58.91
19.	B.Sc.(Hons.)Physics Sem I	16	16	100	NA
20.	B.Sc.(Hons.)Physics Sem II	15	14	93.33	NA
21.	B.Sc.(Hons.)Physics Sem III	14	11	78.57	NA
22.	B.Sc.(Hons.)Physics Sem IV	14	11	78.57	NA
23.	B.Sc.(Hons.)Physics Sem V	23	21	91.30	NA
24.	B.Sc.(Hons.)Physics Sem VI	22	21	95.45	NA
25.	B.Sc.(Hons.)Chemistry Sem I	20	16	80	NA
26.	B.Sc.(Hons.)Chemistry Sem II	19	14	73.68	NA
27.	B.Sc.(Hons.)Chemistry Sem III	23	20	86.96	NA
28.	B.Sc.(Hons.)Chemistry Sem IV	22	22	100	NA
29.	B.Sc.(Hons.)Chemistry Sem V	34	32	94.12	NA
30.	B.Sc.(Hons.)Chemistry Sem VI	33	32	96.97	NA
31.	B.Sc.(Hons.)Maths Sem I	46	41	89.13	NA
32.	B.Sc.(Hons.)Maths Sem II	46	37	80.43	NA
33.	B.Sc.(Biotech) Sem I	33	26	78.79	39.26
34.	B.Sc.(Biotech)Sem II	30	24	80.00	NA
35.	B.Sc.(Biotech)Sem III	34	31	91.18	86.84
36.	B.Sc.(Biotech)Sem IV	34	30	88.24	NA
37.	B.Sc.(Biotech)Sem V	42	42	100	76.19
38.	B.Sc.(Biotech)Sem VI	41	40	97.56	NA
20	DCA Sem I	65	38	58 16	18 18

40.	BCA Sem II	51	2	37	72	2.55	NA		
41.	BCA Sem III	78	(	52	79	9.49	41		1
42.	BCA Sem IV	76	4	51	67	7.11	NA		1
43.	BCA Sem V	70	(	50	85	5.71	68.9	97	1
44.	BCA Sem VI	62	4	58	93	3.55	NA		1
45.	B.Sc. (IT)Sem I	38	2	25	65	5.79	46.	1	1
46.	B.Sc. (IT)Sem II	34	]	17	50	).0	NA		]
47.	B.Sc. (IT)Sem III	31	]	18	58	3.06	66.	19	]
48.	B.Sc. (IT)Sem IV	30	]	19	63	3.33	NA	-	1
49.	B.Sc. (IT)Sem V	42	4	41	97	7.62	81.2	28	1
50.	B.Sc. (IT)Sem VI	38		36	94	1.74	NA		1
Post gr	aduate Programme:								
S.No.	Programme	Students		No. c	of	No.	of	Pass	
		admitted		student		student		percent	tage
		in sessi	on	appeared i	n	passed	in		
		2018-19		Exanimation	n	Exanimat	ion		
				in sessio	n	in ses	sion		
				2018-19		2018-19			
1.	M.Sc. (Botany)Sem I	32		28		87.50		92.31	
2.	M.Sc. (Botany)Sem II	32		32		100		100	
3.	M.Sc. (Botany)Sem III	33		33		100		100	
4.	M.Sc. (Botany)Sem IV	31		31		100		92.59	
6.	M.Sc. (Biotech)Sem I	13		6		46.15		95	
7.	M.Sc. (Biotech)Sem II	12		12		100		NA	
8.	M.Sc. (Biotech)Sem III	13		13		100		80	
9.	M.Sc. (Biotech)Sem IV	10		9		90		NA	
10.	M.Sc. (Chemistry)Sem I	33		29		87.88		59.78	
11.	M.Sc. (Chemistry)Sem II	32		31		96.88		NA	
12.	M.Sc. (Chemistry)Sem III	38		37		97.37		82.98	
13.	M.Sc. (Chemistry)Sem IV	36		36		100		NA	

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100

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100

100

100

63.83

55.56

94.20

84.38

96.55

89.66

94.12

96.97

94.12

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M.Sc. (Computer Science) Sem I

M.Sc. (Computer Science) Sem II

M.Sc. (Computer Science)Sem III

M.Sc. (Computer Science)Sem IV

M.Sc. (IT) Sem I

M.Sc. (IT) Sem II

M.Sc. (IT) Sem III

M.Sc. (IT) Sem IV

M.Sc. (Maths) Sem I

M.Sc. (Maths) Sem II

M.Sc. (Maths) Sem III

M.Sc. (Maths) Sem IV

M.Sc. (Physics) Sem I

M.Sc. (Physics) Sem II

M.Sc. (Physics) Sem III

M.Sc. (Physics) Sem IV

M.Sc. (Zoology) Sem I

M.Sc. (Zoology) Sem II

71.43

80.26

92.92

83.86

70.57

65.34

26.36

57.54

75.79

60.22

64.76

50.77

76.47

64.49

68.75

79.31

NA

NA

32.	M.Sc. (Zoology) Sem III	35	35	100	100
33.	M.Sc. (Zoology) Sem IV	33	33	100	100
34.	PGDCA-I	20	16	80.0	NA
35.	PGDCA-II	15	15	100	NA
36.	DCA -I	52	35	67.31	NA
37.	DCA-II	37	31	83.78	NA

Generally the pass percentage of college students in various streams was above the university pass percentage.

#### Programme specific outcomes:

The students from Punjab and neighbouring states are taken admission in the programme offered by Khalsa College Amritsar and getting beneficial by experienced faculty of the college.

- I. After clearing PG programme in Physics, Chemistry, Maths, Botany, Zoology, Computer Sciences and Biotechnology students are going for
  - i. Ph.D. and M.Phil programmes in institute of higher studies.
  - ii. Jobs in industries and teaching sectors
  - iii. Seeking admissions in International Universities under various programmes.
- II. After clearing Undergraduate programme students are going for
  - I. M.Sc. programme in institute of higher studies.
  - II. B.Ed. in various streams.
  - III. Jobs in industries and teaching sectors

#### **Course outcomes:**

#### P.G. DEPARTMENT OF BIOTECHNOLOGY

The Post Graduate Department of Biotechnology was established in 2002. It has been running B.Sc. Biotechnology course since then. The Masters programme was started in 2013 with an intake of twenty students. These two are the advanced scientific research based programmes and uses the ultramodern scientific instruments to impart both theoretical as well as practical knowledge. The detailed outcomes are as under

#### **B.Sc. Biotechnology**

This undergraduate programme impart basic knowledge of Botany, Zoology, Chemistry, Communication Skills and the most advanced knowledge of Microbiology, Biochemistry, Immunology, Enzymology, Recombinant- DNA Technology, Animal Biotechnology and Plant Biotechnology. The students join and on completion may opt for following out coming careers

The advanced Master degree in Biotechnology and other P.G. branches of Life Sciences
The students may join Biotechnology industry (Food, Pharma, Milk Processing, Breweries, Distilleries, Medical Laboratories etc.)

- The students may opt for various competitive exams after completing their course such as IAS, IPS, IFS, Banking, Co-Operative Society Managers etc.

- They may opt for B.Ed. course also.
- Students are successfully running their IELTS coaching centres.

- Students may open their Mushroom cultivation, Medical Lab, etc after completing this course.

#### M.Sc. Biotechnology

The M.Sc. students have all the above listed outcomes to take advantage of additionally they may opt for

- Ph.D. degree enrolments in Universities and Research centres.
- After NET, they may opt for teaching as their profession.
- They may go for Overseas scholarships after clearing GRE like exams.
- They may start any of Biotechnology industry as an entrepreneur
- They may join R & D of Biotechnology industry.

- They may persue Ph.D. abroad.

- The may join nay national research organisation such as DRDO, FRI etc.

These are just a broad outcome of Biotechnology. A lot more job and research vistas are available in India and Abroad after completing this degree.

#### **P.G. DEPARTMENT OF BOTANY**

The PostGraduation Programme of Botany was started in 2000 at Khalsa College, Amritsar and during 2000-2019 the numbers of seats have been increased from 20 to 45 due to popularity among the students to take admission in the above said programme. The Post-Graduation in Botany deals with the thorough knowledge in pure and applied fields of Botany viz., algae, fungi, cryptogams, phanerogams, plant diseases, metabolism, plant breeding, herbal and natural plant products etc. This course makes the students aware about the application in pharmaceutical, food consumption, biotechnology firms and research & development units. This can make the students aware about the consumerism and sustainable development, role of herbal and medicinal plants to the human health. Keeping in mind that these students can take up teaching at different levels, research work in research institution and industries, doctoral work, environment impact assessment, biodiversity studies, entrepreneurship, scientific writing, relevant topic have been included and updated time to time in the curriculum.

#### P.G. DEPARTMENT OF CHEMISTRY

Department of Chemistry started M.Sc chemistry course in 1978 and B.Sc Hons Chemistry in 2016. During the session 2018-19, 38 students of M.Sc Post-graduate Department of Chemistry passed out; a majority of these students (25) joined B.Ed, Ph.D and courses in International University, some students (5) are teaching in different educational institutes of India. The first batch of B.Sc Hons completed their course in 2019, About 15 students of this batch are doing M.Sc course at various institutes, the remaining are either doing B.Ed or jobs.

#### **P.G. DEPARTMENT OF MATHEMATICS**

P.G. Department of Mathematics was established in the year 1914. The department offers M.Sc. (Mathematics) since 2000 and B.Sc. (Hons.) Mathematics since 2018 along with various interdisciplinary courses. In the session 2018-19, 52 students enrolled in M.Sc. (Mathematics) and 55 students in B.Sc. (Hons.) Mathematics. The department regularly organizes national and international programs to equip the students with high level analytical skills that open the door to wide range of careers. In the session 2018-19, some of the students after qualifying M.Sc. (Mathematics) enrolled for the higher study and some are enrolled in B.Ed. Also, after qualifying M.Sc. (Mathematics) some students have successfully employed in various government and private agencies in the field of academics.

#### P. G. DEPARTMENT OF PHYSICS

The Post Graduate Department of Physics upholds the tradition of exploring new frontier of knowledge and innovation in Physical Sciences. Established in 1928, it has the honour to be one of the oldest science departments of the region. Postgraduate course was started in 2000. The department houses well equipped and separate laboratories. The research facilities have been established in the areas of plasma, material science, thin film sensors, glasses, radiation physics, nanoparticles and theoretical physics. Department has been recognized as star status by UGC under College with potential for excellent and DBT under star scheme. First batch of B.Sc. (hons) Physics passed out in 2019. Four students pursuing M.Sc. in University, eight are doing M.Sc. in college and other are opt the B.Ed , competition and seeking admission in Foreign Universities. M.Sc. passed out students opt the teaching jobs, preparing for NET and competition. B.Sc. (Non-Medical) students after completion of degree are seeking admission in the abroad, perusing higher education in various streams & B.Ed. Some are preparing for Competition and other opt jobs in different fields.

#### P. G. DEPARTMENT OF ZOOLOGY

#### Justification of B.Sc. Medical and M.SC (Zoology)

This programme is offered to the students to create awareness about science. The graduate can further disseminate the knowledge among masses and teach younger children in schools. They can further pursue their carrier by joining Post graduate courses B.Ed. / Ph.D. They can be employed as teachers, scientists or medical representative in Pharma Industry.

Zoology as a subject helps in sensitizing the students towards animal, their needs, ecosystem, biodiversity & environment as a whole.

#### P. G. DEPARTMENT OF COMPUTER SCIENCE B.Sc (Computer Science)

#### **Programme Outcomes**

1. Scientific knowledge: Apply the knowledge of mathematics, science, and computing to the solution of complex scientific problems.

2. Problem analysis: Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and applied sciences.

3. Design/development of solutions: Design solutions for complex problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. Modern tools usage: Create, select, and apply appropriate techniques, resources, and modern computing and IT tools including prediction and modelling to complex scientific activities with an understanding of the limitations.

6. The software engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional practice.

#### **Programme Specific Outcomes**

A graduate with a B.Sc. in Computer Science will have the ability to:-

1. Demonstrate mastery of Computer Science in the following core knowledge areas

- 1. Data Structures and Programming Languages
- 2. Databases, Software Engineering and Development
- 3. Computer Hardware and Architecture

2. Apply problem-solving skills and the knowledge of computer science to solve real world problems.

3. Develop technical project reports and present them orally among the users.

- 4. The success rate of course remains approximately 96% to 97%.
- 5. Students are placed in multinational companies such as Wipro and Touchstone.

#### B.Sc.IT

#### **Programme Outcomes**

Upon completion of the B. Sc. Information Technology program, students will be able to:

- Identify information technology related problems, analyze them and design the system or provide the solution for the problem.
- Ability to get employment opportunities in corporate/government/private sectors or to be a successful entrepreneur.
- Ability to use the modern programming languages, tools, techniques and skills necessary for design, develop and deploy software based applications.
- Capability to move on to higher level learning based on computer science fundamentals.

- Serve as the Programmers or the Software Engineers with the sound knowledge of practical and theoretical concepts for developing software.
- Serve as the Web Designers with latest web development technologies.
- To Give Technical Support for the various systems.
- Work as IT Sales and Marketing person.
- Serve as the IT Officers in Banks and cooperative societies.

#### **Programme Specific Outcomes**

B.Sc. IT has been designed to prepare graduates for attaining the following specific outcomes:

- Ability to analyze, interpret and present findings effectively using mathematical and communication skills.
- Understand the fundamentals and applications of programming, data structures, databases, networking, web development using PHP, Python, Java programming, Graphics and compiler design.
- Ability to effectively apply the computer science concepts to analyze, design and develop cost effective, efficient and secure solutions to the societal problems.
- Ability to get employment opportunities in corporate/government/private sectors or to be a successful entrepreneur
- This program aims at imparting to the students the skills to use wide range of technologies and programming language for system analysis and software development.
- The program prepares the students who wish to acquire high skills in computers, computers applications and Information Technology.
- The success rate of course remains approximately 95%.
- 93% of B.Sc.IT course students are placed as a programmer, developer, Trainer, IT executive, IT managers and Technical analyst in national and multinational renowned companies in Infosys, TCS, Wipro, Kotak Mahindra Bank, Touchstone, Kochar Infotech, and Profilety.

#### **BCA**

#### **PROGRAMME OUTCOMES:**

Upon graduation, students will be able to:

- To provide thorough understanding of nature, scope and application of computer and computer languages.
- Demonstrate use of appropriate techniques to effectively manage business challenges.
- Capable of recognizing and resolving ethical issues.
- Develop various real time applications using latest technologies and programming languages.
- Possess strong foundation for their higher studies.
- Blend analytical, logical and managerial skills with the technical aspects to resolve real world issues.
- Become employable in various IT companies and government jobs.

#### PROGRAMME SPECIFIC OUTCOMES:

BCA programme has been designed to prepare graduates for attaining the following specific outcomes:

- An ability to inculcate knowledge of mathematics, computer science and management in practice.
- An ability to enhance not only comprehensive understanding of the theory but its application too in diverse field.
- The program prepares the young professional for a range of computer applications,

computer

Organization, techniques of computer networking, software engineering-Commerce, Web Designing, Big Data, IOT, Python and Advance JAVA.

- An ability to design a computing system to meet desired needs within realistic constraints such as safety, security and applicability in multidisciplinary teams with positive attitude.
- An ability to communicate effectively.
- In order to enhance programming skills of the young IT professionals, the program has introduced the concept of project development in each language/technology learnt during semester.
- To provide interdisciplinary approach among the students
- The success rate of course remains approximately 95%.
- 100% students are placed in multinational and national companies (Capegemini, Profilety, American digital world, Touch stone, ThinkItGermany)

#### **COURSE OUTCOMES:**

#### Semester I

#### Fundamentals of Information Technology (BCA-C101)

Upon completion of this course, students will be able to:

- Understand basic computer hardware architecture and be able to design fundamental logic circuits.
- Convert between different number systems and describe some different codes.
- Understand the functions of basic digital combinatorial circuits and sequential circuits.
- Understand the fundamental hardware components that make up a computer's hardware and the role of each of these components.
- Understand the role of CPU and its components.
- Learn essential IT support skills including installing, configuring, securing and troubleshooting operating systems and hardware.
- Gain hands-on experience of working in Microsoft products such as: MS Word, MS Excel and MS Powerpoint.

#### Programming in C (BCA-C102)

Upon completion of this course, students will be able to:

- Learn how to build by the algorithms for problems.
- Learn how to create pictorial representations of the program.
- Learn how to apply logic for problems.
- Enhance their programming skills.

### Ability Enhancement Compulsory Course - I

#### **Technical Communication (BCA-C103)**

Upon completion of this course, students will be able to:

- Developing and delivering effective communication.
- Writing letters, applications, resume, notes etc. using Microsoft Word editor.
- Carry out business correspondence effectively.

#### Ability Enhancement Compulsory Course - II

#### Mathematical Foundation of Computer Science (BCA-C104)

Upon completion of this course, students will be able to:

- Apply knowledge of computing and mathematics appropriate to the discipline.
- Analyze a problem and identify and define the computing requirements to solution.
- Understand some aspects of computer programming.
- Understand the concepts of algorithms.
- Apply knowledge of computing, mathematics, science, and engineering appropriate

to the modeling and design of software.

• Implement the numerical methods using computer software and apply them in examples.

#### Semester II

#### Data Structures Using ' C ' (BCA-C201)

Upon completion of this course, students will be able to:

#### **Course: M.Sc. (Computer Science)**

#### **Programme Outcomes**

- Analysis & design of complex problems: Ability to apply knowledge of computer science concepts, principles & techniques to solve various computing problems.
- Coding skills: Apply and solve problems using computer programming and simulation.
- Ethics: Apply ethical principles and commit to professional ethics and responsibilities for societal benefits.
- **Communication**: Communicate effectively problem findings, and to be able to assimilate, write and present effective design documents to give and receive clear instructions.
- Societal Impact: Acquire and apply advanced knowledge of concepts and participate in sustainable development.
- **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of upcoming information technology changes.

#### **Programme Specific Outcomes**

- Understand and comprehend advanced level of programming, data structures, databases, networking, mobile computing, information security and data analysis.
- Demonstrate competence in using computer science concepts and computational tools for simulation and digital transformation.
- Ability to effectively apply the information technology concepts to analyse, design and develop cost effective solutions to the societal problems.
- Provide user friendly and need based mobile, web or cloud based solutions to the society.
- The success rate of course remains approximately 100%.
- 87% students are placed in multinational and national companies (Capegemini, Profilety, American digital world, Touch stone, ThinkItGermany)

#### M.Sc. (Information Technology)

#### **Programme Outcomes**

- Recognize the need to engage in independent life-long learning in the broadest context of upcoming information technology changes.
- Communicate problem findings for ability to assimilate and present effective design documents to give for clear instructions.
- Applying knowledge for solving problems using computer programming along with simulation.
- Applying ethical principles for committing to professional ethics and responsibilities for societal benefits.
- Acquiring and applying advanced knowledge of concepts and participate in sustainable development.
- Able to apply knowledge of information technology concepts, principles & techniques to solve various computing problems.
- Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

#### **Programme Specific Outcomes**

- 1. Deal with real world data.
- 2. Familiar about real time IT industry environment.
- 3. Experience about applying the knowledge they got up-till now.
- 4. Build a whole real time working system which will satisfy all customer's needs.
- 5. The success rate of course remains approximately 100%.
- 6. 92% students are placed in multinational and national companies (Capegemini, Profilety, American digital world, Touch stone, ThinkItGermany)

#### P.G. Diploma in Computer Applications

#### **Programme Outcomes**

- Analysis & design of complex problems : Ability to apply knowledge of computer science concepts, principles & techniques to solve various computing problems.
- Coding skills : Apply and solve problems using computer programming and simulation.
- **Ethics :** Apply ethical principles and commit to professional ethics and responsibilities for societal benefits.
- **Communication :** Communicate effectively problem findings, and to be able to assimilate, write and present effective design documents to give and receive clear instructions.
- **Societal Impact :** Acquire and apply advanced knowledge of concepts and participate in sustainable development.
- Individual and team work : Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- Life-long learning : Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of upcoming information technology changes.

#### **Programme Specific Outcomes**

- Understand and comprehend advanced level of programming, databases, networks concept and management, Web Designing & Uses of Internet and data analysis.
- Demonstrate competence in using computer science concepts and computational tools for simulation and digital transformation.
- Ability to effectively apply the information technology concepts to analyze, design and develop cost effective solutions to the societal problems.
- Provide user friendly and need based mobile, web or cloud based solutions to the society.
- Success rate of course remains approx. 100%

#### Diploma in Computer Hardware & Network Maintenance Programme Outcomes:

- Installing, maintaining and repairing software or hardware
- Troubleshooting different computer issues
- Determining and installing appropriate security measures
- Installing & Configuring basic computer networks
- Providing technical support on-site or via phone or email
- Install, configure, and maintain common end user application software. May train and provide assistance to end users.

• Troubleshoots software and hardware problems related to Internet applications.

#### **Programme Specific Outcomes:**

- Perform all the functions with Electrical and Electronic Components related to Computer and Networking system.
- Assembling and repairing of Desktop Computer with all its hardware components.

- Installation of different Operating System and all other application software.
- Customization of Operating System and maintenance of system application software.
- Assembling, repairing of Laptop and its hardware components.
- Perform the operations of office package (word, excel, power point).
- Installation of Printer, Scanner and troubleshoot their faults.
- Setting up and configuring Networking System using various network devices.

#### **Diploma in Computer Applications**

#### **Programme Outcomes:**

- Demonstrate a basic understanding of computer hardware and software.
- Demonstrate problem-solving skills.
- Describe the features and functions of the major categories of applications software (spreadsheet, database, and project management)
- Demonstrate a working knowledge of the Internet that includes effective strategies for online research and correct citation of Internet based resources.
- Apply logical skills to programming in a variety of languages.
- Utilize web technologies.
- Demonstrate basic understanding of network principles.

#### **Programme Specific Outcomes:**

- Understanding the concept of input and output devices of Computers
- Learn the functional units and classify types of computers, how they process information and how individual computers interact with other computing systems and devices.
- Understand an operating system and its working, and solve common problems related to operating systems
- Learn basic word processing, Spreadsheet and Presentation Graphics Software skills.
- Study to use the Internet safely, legally, and responsibly.
- Success rate of course remains approx. 84%

## Khalsa College Amritsar

### PG Department of Commerce and Business Administration

### **Program Outcomes, Program Specific Outcomes and Course Outcomes**

The following programs have been offered at different levels by the department:

1.	<b>Research Degree Courses:</b>	M.Phil. (One Year, Two Semesters)
2.	Post Graduate Degree Courses:	M.Com. (Two Year, Four Semesters)
3.	Under Graduate Degree Courses:	B.Com. (Hons) (Three Year, Six Semesters)
		B.Com. (Pass) (Three Year, Six Semesters)
		BBA (Three Year, Six Semesters)
4.	Diploma Courses:	PGDFS (One Year, Two Semesters)
		DRM (One Year, Two Semesters)
		DCA/CCCA (One Year, Two Semesters)

#### **Program outcomes**

The aforesaid degree and diploma courses aim to provide the students with the knowledge and practical training regarding banking, insurance, retail, marketing, computerised accounting etc., tools of analysis and skills to understand and participate in the modern business and economic world. The specific program outcomes are as follows:

Specific Program	Outcome
M.Phil.	The Students are given research guidance
	which helps them in major research projects
	during Ph.D. They are acquainted with
	various updated research tools and
	techniques. There are provisions to prepare
	Dissertation to instill some primary concepts
	of academic research in field of finance,
	marketing and HR.
M.Com.	The students are provided with the practical
	exposure in finance, marketing, HRM and
	taxation that would equip the student to face
	the modern day challenges in Commerce and
	Business. Moreover, the Job oriented skills
	are taught which ensure that the students are
	fit for every challenging situation. There are
	some requirements to test in the form of

	preparation of Assignment /Seminar Report/					
	Term Paper to impart knowledge about					
	primary concepts of different areas among					
	the post graduate students.					
B.Com. (Pass and Hons.)	Both degree courses provide expertise					
	knowledge to the students in various fields of					
	business like business and company law,					
	management, marketing and income tax.					
	Workshops for e-filing of income tax and					
	GST returns are organised to help them in e-					
	filing of returns.					
BBA	The students have been imparted knowledge					
	regarding set up of new entrepreneurial firms					
	and ability to recognize the role of business					
	persons, entrepreneur, manager and					
	consultant.					
PGDFS, DRM and DCA/ CCCA	These Diplomas help in learning new					
	improved technological upgradation in					
	banking and finance, retail sector and					
	computerised accounting world.					

#### **Course Outcomes:**

The current syllabus of various courses is well chosen from the whole corpus of business world to represent different events from different angles of business activities. They are not meant just to make the students familiar with the prevailing areas of business but also to open out new perspectives, the student may acquire knowledge of the changing nature of business environment of the changing times. Job oriented skills among students have been developed to ensure that they are fit for every challenging situation. The present syllabi aim to provide expertise in ways to contribute towards the development of new practices and procedures of accounting, taxation, banking and insurance etc.