



IAC

**BS in Game Design
(Scheme of Study)**

(HEC 2023 Undergrad Policy)

Application from FALL 2024 onwards

School of Digital & Cinematic Arts (SDCA)

BS in Game Design & Development

4-Year Degree Program Roadmap

Eligibility Criteria

- **Intermediate, A-Level or equivalent studies.**
- **Equivalence certificates issued by IBCC in case of O/A levels or qualifications from Foreign Universities/Institutes only.**

Duration

4 Years (8 Semesters)

Degree Completion Requirements (AS PER HEC POLICY)

137 credit hours with a minimum GPA of 2.0 for degree eligibility.

BS in Game Design & Development

4-Year Degree Program Roadmap

⇒ General Education Courses	= 32 Credit Hrs. (13 Courses)
⇒ Interdisciplinary / Allied Courses (minimum 12 credit hours).	= 15 Credit Hrs. (05 Courses)
⇒ Major courses (minimum 72 credit hours)	= 84 Credit Hrs. (28 Courses)
⇒ Field Experience / Internship	= 03 Credit Hrs. (01 Courses)
⇒ Capstone Project	= 03 Credit Hrs. (01 Courses)
⇒ Total Credit Hours	= 137 Credit Hrs. (48 Courses)

Semester 1				
Course Code	Course Title	Credit Hrs.	Course Category	Pre-Req
GED-100	Nazra Quran	0	General Education	None
GED-101	Functional English	3(3+0)	General Education – 1	None
GED-102	Quantitative Reasoning I	3(3+0)	General Education – 2	None
GED-103	Islamic Studies	2(2+0)	General Education – 3	None
GED-104	Applications of Information and Communication Technologies (ICT)	3(2+1)	General Education – 4	None
SOC-101	Introduction to Soft Skills	3(2+1)	Interdisciplinary 1	None
GDD-102	Fundamentals of Game Design	3(2+1)	Major 1	None
Total Credit Hours		17(14+3)		

Semester 2				
Course Code	Course Title	Credit Hrs.	Course Category	Pre-Req
GED-105	Expository Writing	3(3+0)	General Education – 5	GED-101
GED-106	Quantitative Reasoning II	3(3+0)	General Education – 6	GED-102
GED-107	Ideology and Constitution of Pakistan	2(2+0)	General Education – 7	None
GED-108	Philosophy	2(2+0)	General Education – 8 (Social Science)	None
GED-109	Creative Arts		General Education – 9	None

		2(2+0)	(Art & Humanities)	
GDD-101	Introduction to Drawing	3(2+1)	Major 2	None
GDD-103	Digital Tools 1	3(1+2)	Major 3	None
Total Credit Hours		18(15+3)		

Semester 3				
Course Code	Course Title	Credit Hrs.	Course Category	Pre-Req
GED-201	Civics and Community Engagement	2(2+0)	General Education – 10	None
GED-203	Pakistan Studies	2(2+0)	General Education-11	None
GED-204	Ecology	3(2+1)	General Education-12 (Natural Science)	None
SOC-201	Soft Skills & Personality Development	3(2+1)	Interdisciplinary 2	SOC-101
GDD-202	Introduction to Game Art	3(2+1)	Major 4	None
GDD-203	Programming Fundamentals for Games	3(2+1)	Major 5	None
Total Credit Hours		16(12+4)		

Semester 4				
Course Code	Course Title	Credit Hrs.	Course Category	Pre-Req
GED-202	Entrepreneurship	2(2+0)	General Education -13	None
SOC-202	Soft Skills & Professional Development	3(2+1)	Interdisciplinary 3	SOC-201
FTV- 201	Cinematography	3(0+3)	Interdisciplinary 4	None
GDD-206	Game Architecture and Prototyping	3(1+2)	Major 6	None

GDD-207	Advance Game Art	3(1+2)	Major 7	None
AND-204	Analytical Drawing for Games	3(1+2)	Major 8	None
Total Credit Hours		17(7+10)		

Semester 5				
Course Code	Course Title	Credit Hrs.	Course Category	Pre-Req
PRM-301	Project Management	3(2+1)	Interdisciplinary 5	None
GDD-301	Introduction to VFX	3(1+2)	Major 9	None
GDD-304	Concept Art for Games	3(2+1)	Major 10	None
GDD-305	Storytelling and Narrative Design	3(2+1)	Major 11	None
GDD-309	Gesture Drawing and Characterization	3(1+2)	Major 12	None
GDD-311	3 D Animation	3(1+2)	Major 13	None
Total Credit Hours		18(9+9)		

Semester 6				
Course Code	Course Title	Credit Hrs.	Course Category	Pre-Req
GDD-306	Game Monetization and Live Ops	3(1+2)	Major 14	None
GDD-307	AR/VR Technology	3(1+2)	Major 15	None
GDD-312	Game History and Culture	3(3+0)	Major 16	None
GDD-314	AI and Machine Learning	3(2+1)	Major 17	None
GDD-319	Game Mechanics and System Design	3(2+1)	Major 18	
GDD-320	Game Design and Production	3(0+3)	Major 19	

Total Credit Hours	18(9+9)		
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Semester 7				
Course Code	Course Title	Credit Hrs.	Course Category	Pre-Req
GDD-406	Internship	3(0+3)	Compulsory	None
GDD-411	Human- Centered Design Research	3(3+0)	Major 20	None
GDD-412	Human Computer Interface (HCI)	3(2+1)	Major 21	None
GDD-421	Digital Sound and Music	3(1+2)	Major 22	None
GDD-422	Game Production Pipeline and Agile Methodologies	3(3+0)	Major 23	None
GDD-498	Game Design Pre-Production	3(0+3)	Major 24	None
Total Credit Hours		18(9+9)		

Semester 8				
Course Code	Course Title	Credit Hrs.	Course Category	Pre-Req
GDD-499	Capstone Project	3(0+3)	Compulsory	GDD-498
GDD-403	Game Aesthetics	3(1+2)	Major 25	None
GDD-404	Research and Report Writing	3(3+0)	Major 26	None
GDD-410	Game Distribution and Marketing Essentials	3(1+2)	Major 27	None

GDD-419	Game Quality Engineering	3(3+0)	Major 28	None
Total Credit Hours		15(8+7)		

General Education Courses			
Sr.	Course Code	Course Title	Credit Hrs.
1	GED-100	Nazra Quran	0
2	GED-101	Functional English	3(3+0)
3	GED-102	Quantitative Reasoning I	3(3+0)
4	GED-103	Islamic Studies	2(2+0)
5	GED-104	Application of Information & Communication Technologies (ICT)	3(2+1)
6	GED-105	Expository Writing	3(3+0)
7	GED-106	Quantitative Reasoning II	3(3+0)
8	GED-107	Ideology and Constitution of Pakistan	2(2+0)
9	GED-108	Philosophy (Social Sciences)	2(2+0)
10	GED-109	Creative Arts (Art & Humanities)	2(2+0)
11	GED-201	Civics and Community Engagement	2(2+0)
12	GED-202	Entrepreneurship	2(2+0)
13	GED-203	Pakistan Studies	2(2+0)
14	GED-204	Ecology (Natural Sciences)	3(2+1)
		Total Credits:	32(30+2)

		Interdisciplinary/Allied Courses (Minimum 12 Credit Hours)	
Sr.	Course Code	Course Title	Credit Hrs.
1	SOC-101	Introduction to Soft Skills	3(2+1)
2	SOC-201	Soft Skills & Personality Development	3(2+1)
3	SOC-202	Soft Skills & Personality Development	3(2+1)
4	FTV-201	Cinematography	3(0+3)
5	PRM-301	Game Project Management	3(3+0)

		Major/ Core Course List	
Sr.	Course Code	Course Title	Credit Hrs.
1	GDD-101	Introduction to Drawing	3(1+2)
2	GDD-102	Fundamentals of Game Design	3(2+1)
3	GDD-103	Digital Tools	3(1+2)
4	GDD-202	Introduction to Game Art	3(2+1)
5	GDD-203	Programming Fundamentals	3(2+1)
6	GDD-206	Game Architecture and Photocopying	3(1+2)
7	GDD-207	Advanced Game Art b	3(1+2)
8	GDD-208	Analytical Drawing for Games	3(1+2)
9	GDD-301	Introduction of VFX	3(1+2)
10	GDD-304	Concept Art for Games	3(2+1)
11	GDD-305	Storytelling and Narrative Design	3(2+1)
12	GDD-306	Game Monetization and Live Ops	3(1+2)

13	GDD-307	AR/VR Technologies	3(1+2)
14	GDD-309	Gesture Drawing and Characterization	3(1+2)
15	GDD-311	3D Animation	3(1+2)
16	GDD-312	Game History and Culture	3(3+0)
17	GDD-314	AI and Machine Learning	3(2+1)
18	GDD-319	Game Machines and System Design	3(2+1)
19	GDD-320	Game Design and Production	3(0+3)
20	GDD-403	Game Experience and Refinements	3(1+2)
21	GDD-404	Research and Report Writing	3(3+0)
22	GDD-410	Game Distribution and Marketing Essentials	3(1+2)
23	GDD-411	Human- Centered Design Research	3(3+0)
24	GDD-412	Human Computer Interface	3(2+1)
25	GDD-419	Game Quality Engineering	3(3+0)
26	GDD-420	Narrative Design	3(3+0)
27	GDD-421	Digital Sound and Music	3(1+2)
28	GDD-422	Game Production and Agile Methodologies	3(3+0)
29	GDD-498	Game Design Pre- Production	3(0+3)
30	GDD-499	Capstone Project	3(0+3)