(Formerly West Bengal University of Technology)

Syllabus for B. Sc. In Gaming & Mobile Application Development (Effective for Academic Session 2019-2020)

SEMESTER-VI

Paper: Introduction to VR

Code: BGD – 601

Contacts Hours / Week: 2T+2P

Credits:4

Units	Course Content
Unit 1	Introduction to VR, What are various type of Virtual Reality systems. How to develop in VR game system. Equipment for VR apps and movies. Camera systems,
	3D game and VR game.
Unit 2	Tools for VR & Engine working sectors.
Unit 2	In-class work-session for final project

- 1. https://developer.oculus.com/documentation/mobilesdk/latest/
- 2. Emerging Trends in Virtual Reality for Gaming: an assessment of best practices from research and development in the gaming industry Dr. Jason Nolan, Daniel Harley (RE/Lab, Ryerson University) Anthony Walsh, Eric McQuiggan (Phantom Compass Inc.)
- 3. http://ict.usc.edu/pubs/Virtual%20Reality%20and%20Interactive%20Digital%20Game%20Techn ology-%20New%20Tools%20to%20Address%20Obesity%20and%20Diabetes.pdf

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Syllabus for B. Sc. In Gaming & Mobile Application Development (Effective for Academic Session 2019-2020)

Paper: Introduction to AR

Code: BGD – 602

Contacts Hours / Week: 2T+1P

Credits: 3

Units	Course Content
Unit 1	Introduction to AR, What are various type of Augmented Reality systems. How to
	develop in AR game system. Equipment for AR apps.
Unit 2	How you can plan for making AR based games, Basic game structures, Making of
	casual AR game

- 1. Game Development For An Augmented Reality System By Thomas Wright Advisor Michael G. Branton
- 2. Research Article: KioskAR: An Augmented Reality Game as a New Business Model to Present Artworks Yoones A. Sekhavat

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Syllabus for B. Sc. In Gaming & Mobile Application Development (Effective for Academic Session 2019-2020)

Paper: AR Game Development

Code: BGD - 603

Contacts Hours / Week: 1T+3P

Credits: 4

Units	Course Content
Unit 1	3D game and AR game. Location-Based versus Marker-Based AR. AR View, Usability. Load detection. AR 3D pipeline and Debug
Unit 2	AR Design for Social Interaction.

- 1. Game Development For An Augmented Reality System By Thomas Wright Advisor Michael G. Branton
- 2. Research Article: KioskAR: An Augmented Reality Game as a New Business Model to Present Artworks Yoones A. Sekhavat

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Syllabus for B. Sc. In Gaming & Mobile Application Development (Effective for Academic Session 2019-2020)

Paper: XR Game Development

Code: BGD – **604**

Contacts Hours / Week: 1L+1T+3P

Credits: 5

Units	Course Content
Unit 1	Final project on VR and AR casual game. XR 3D game introduction, XR 3D pipeline. Different languages for VR and AR which makes Mixed reality games.
Unit 2	XR Design for Social Interaction.

- 1. Game Development For An Augmented Reality System By Thomas Wright Advisor Michael G. Branton
- 2. Research Article: KioskAR: An Augmented Reality Game as a New Business Model to Present Artworks Yoones A. Sekhavat

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Syllabus for B. Sc. In Gaming & Mobile Application Development (Effective for Academic Session 2019-2020)

Paper: Business and Legal Issues for Video Game Developers

Code: BGD - 605

Contacts Hours / Week: 3T+1P

Credits:4

Units	Course Content
Unit 1	Console Manufacturers ,Digital Distributors ,Mobile, Console and PC publishers ,Mobile publishers The Changing Landscape of the Video Game Industry , End of Life Economics , Future Consoles Rise of Digital Distribution, Rise of Mobile Gaming , Rise of Free-to-Play and other Monetization Schemes , Legal Challenges Created by Innovation.
Unit 2	The Role of the Publisher - Funding ,Quality Assurance (QA) and Submission , Retail Distribution, Marketing

- 1. Mastering The Game By David Greenspan With Contributions From S. Gregory Boyd, Jas Purewal And Matthew Datum
- 2. https://www.crcpress.com/rsc/downloads/SB3 Practices of Game Design Indie Game Marketing FreeBook.pdf