SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS

Institutional (Comprehensive) Program Review Report to the Board of Regents

Use this form to submit a program review report to the system Chief Academic Officer. Complete this form for all units/programs undergoing an accreditation review, nationally recognized review process, or institutional program review. The report is due 30 days following receipt of the external and internal review reports.

UNIVERSITY:	DSU
DEPARTMENT OR SCHOOL:	**Beacom College of Computer and Cyber Sciences & College of Arts and Sciences**
PROGRAM REVIEWED:	**Bachelor of Science in Computer Game Design (CGD)**
DATE OF REVIEW:	**9/9/2024**
TYPE OF REVIEW:	Institutional Program Review

University Approval

To the Board of Regents and the Executive Director: I certify that I have read this report, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.

_____   5/27/2025
President of the University   Date

1. **Identify the program reviewers and any external accrediting body:**
   The external review was conducted by Dr. Geoffrey Long, Assistant Professor and Director of the Miami University Games & Simulation Program. Dr. Long has an extensive background in game design, having worked with MIT, USC, and Microsoft Studios. This was his second review of the CGD program, following an initial review in 2016. While no specific external accrediting body is explicitly mentioned in the summary, the program is recognized by The Princeton Review, which ranked it among the top game design programs in 2024 and 2025—indicating external validation of program quality.

2. **Items A & B should address the following issues: mission centrality, program quality, cost, program productivity, plans for the future, and assessment of progress.**

   2(A). **Describe the strengths and weaknesses identified by the reviewers**

   - **Mission Centrality**
     The Bachelor of Science in Computer Game Design (CGD) program remains closely aligned with Dakota State University's institutional mission and strategic priorities,

particularly in its integration of cybersecurity and artificial intelligence. As an interdisciplinary initiative between the Beacom College of Computer and Cyber Sciences and the College of Arts and Sciences, the program reflects DSU's commitment to innovation and practical education. The curriculum's emerging focus on serious games and AI-enhanced development underscores this alignment. However, continued development is needed to fully embed these interdisciplinary strengths throughout the program.

- **Program Quality**
  The CGD program has demonstrated significant improvement since the 2016 review, achieving national and international recognition, including top rankings by *The Princeton Review* in 2024 and 2025. The curriculum has evolved to include iterative game design cycles, which engage students early in project-based learning and strengthen their technical portfolios. Faculty members, Professors Britton and Pederson, provide exceptional mentorship that supports individualized student growth. Furthermore, students consistently publish work on platforms like Steam and Itch.io, demonstrating quality outcomes and industry relevance. The review also highlighted that while student success is strong, continued updates in assessment methods and curriculum innovation will be key to sustaining program quality.

- **Cost and Resource Allocation**
  The university has made considerable investments in hardware, software, and faculty development, including support for attendance at major industry events such as the Game Developers Conference (GDC). These investments have advanced teaching and learning quality. However, resource constraints remain. Specifically, the program lacks sufficient funding to support student travel to professional events and to purchase specialized equipment like high-performance GPUs, VR headsets, and drawing tablets. These limitations impact the scalability and depth of student experiences, particularly in advanced game development projects.

- **Program Productivity**
  Maintaining a stable enrollment of approximately 100-125 students, the CGD program has established itself as both sustainable and productive. Nearly 100% of graduates secure employment in the field, and the program has begun introducing entrepreneurial training to support student-led game publishing and innovation. Faculty-led outreach and collaboration with local communities have also expanded the program's reach and appeal. Nevertheless, the growing student population places pressure on existing faculty, raising concerns about class sizes and the ability to maintain high levels of individualized instruction.

- **Plans for the Future**
  The program's future plans include deeper integration of AI and cybersecurity tools, expanding student exposure to industry events, and establishing a not-for-profit incubator to support student startups and strengthen ties to the state's digital economy. These goals are forward-looking and align with current and emerging industry demands. However, achieving them will require sustained investments in infrastructure, instructional capacity, and external partnerships.

- **Assessment of Progress**
  Since the previous review, substantial progress has been made in curriculum enhancement, faculty development, and industry engagement. Faculty have begun strengthening program assessment through ongoing professional involvement and are preparing to introduce external reviews of senior projects by industry professionals. This added layer of evaluation is intended to ensure student work remains aligned

with industry standards. A more formalized assessment framework will be essential for continuous improvement.

2(B).   Briefly summarize the review recommendations

The reviewer provided a comprehensive set of recommendations aimed at helping the CGD program evolve from stabilization to strategic growth. These fall into several core areas:

- **Mission Centrality**
  - Define clear expectations for faculty tenure and scholarship, ensuring mutual understanding between administration and faculty on what counts as impactful academic and industry-facing contributions.
  - Further integrate cybersecurity and AI into the program's identity, including exploration of a 4+1 combined bachelor's/master's pathway in Games and AI.
- **Program Quality**
  - Introduce greater curricular flexibility, allowing students to tailor coursework to their strengths (e.g., programming vs. art).
- **Cost and Resource Allocation**
  - Hire an additional faculty member, ideally with AI expertise, to alleviate overload and sustain program growth.
  - Upgrade lab and student equipment, including laptops with dedicated GPUs and access to VR/drawing hardware.
  - Secure additional funding for faculty and student travel to events like GDC to maintain industry awareness and build networks.
- **Program Productivity**
  - Formalize external evaluations of senior student projects by industry professionals to improve assessment authenticity.
  - Develop a game incubator or accelerator to support student startups and address South Dakota's lack of local gaming studios.
  - Act as a publisher for student work to raise visibility and credibility of the program in the broader gaming industry.
- **Plans for the Future**
  - Create a proactive five-year plan that outlines programmatic goals, resource needs, and faculty development timelines.
- **Assessment of Progress**
  - Strengthen advising support, particularly in the first year, and improve faculty communication with general education instructors to minimize graduation delays.
  - Reframe assessment to include industry impact metrics alongside traditional academic benchmarks.
  - Expand outreach and recruitment efforts, particularly among underrepresented and regional student populations.

2(C).   Indicate the present and continuous actions to be taken by the college or department to address the issues raised by the review. What outcomes are anticipated as a result of these actions?

To address the issues raised in the review, the CGD program is engaging in several targeted and strategic actions designed to strengthen program quality, relevance, and community engagement:

- **Expanding Student Access to Industry Experiences:** Faculty are actively identifying and pursuing new funding sources to support student participation in high-impact industry events such as the Game Developers Conference. This initiative aims to deepen professional development, improve job placement rates, and cultivate industry connections that align with career pathways in game design.
- **Investing in Advanced Game Development Infrastructure**: The program is seeking institutional and grant-based funding to acquire specialized equipment, including VR headsets, high-performance GPUs, and professional-grade drawing tablets. These enhancements are essential for supporting complex, innovative projects and ensuring that students gain experience with tools currently used in the field.
- **Embedding External Industry Evaluation into Program Assessment:** Plans are underway to incorporate formal assessments of final-year student projects by experienced game development professionals. These evaluations will benchmark student work against real-world standards, helping students refine their portfolios and increase their marketability in a competitive job landscape.
- **Strengthening Faculty Resources and Program Capacity:** The department is assessing faculty workload and exploring options to expand instructional support to accommodate the program's growing enrollment and evolving curriculum. This will ensure sustained quality of instruction and mentorship for students.
- **Integrating Emerging Technologies into Curriculum:** Faculty are actively incorporating AI-driven development tools and gamified cybersecurity elements into coursework, reinforcing DSU's interdisciplinary focus and keeping the curriculum at the forefront of innovation.
- **Laying the Foundation for an Entrepreneurial Incubator:** Long-term planning is underway to establish a non-profit incubator that will support student-led ventures. This initiative will help transform student projects into viable startups and bolster South Dakota's developing game design industry.
- **Strengthening Outreach and Community Engagement**: Continued recruitment efforts are underway to broaden student interest in the program. Faculty are exploring collaborations with local communities to develop game projects that reflect regional history and storytelling, enhancing engagement and enriching the educational experience.

Anticipated Outcomes
These collective actions are expected to:
- Increase student competitiveness in the global game development market.
- Expand access to real-world tools and networking opportunities.
- Elevate curriculum relevance and rigor through industry alignment.
- Enhance faculty effectiveness and student mentorship capacity.
- Foster entrepreneurial ventures and local industry growth.

3. **Starting in Fall 2019 reporting year, campuses will identify the undergraduate cross-curricular skill requirements as part of programmatic student learning outcomes and identify assessment methods for cross-curricular skill requirements as outlined in Board Policy 2.3.9. Program review completed prior to Fall 2019 need not include cross curricular skills.**

The CGD program aligns with Board Policy 2.3.9, ensuring that students gain interdisciplinary skills essential for success in the game design industry. This includes:

- **Problem-Solving & Analytical Thinking** – Integrated into project-based coursework and portfolio development.
- **Digital Literacy & AI Integration** – Emphasized through the adoption of AI-driven design tools and development frameworks.
- **Collaboration & Teamwork** – Fostered through iterative design cycles and interdisciplinary group projects.
- **Communication & Presentation Skills** – Strengthened through industry presentations, professional networking, and external project evaluations.

Assessment methods include:
- **Capstone project evaluations** by external industry professionals.
- **Portfolio reviews** incorporating faculty and industry feedback.
- **Performance metrics** tied to student placement rates and entrepreneurial success.