

KANBAR COLLEGE OF DESIGN, ENGINEERING & COMMERCE (KANBAR)

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College Website (<https://jefferson.edu/Kanbar/>)

About Us

Kanbar College offers an innovative and transdisciplinary approach to teaching and learning that provides students with the skills and knowledge to think creatively, brainstorm out-of-the-box ideas and work collaboratively to discover innovative solutions to complex problems.

Through the integrated DEC core curriculum, students gain the added value of expertise in related fields as well as deep discipline-specific knowledge. The program retains the core learning of each major while forging new collaborations between designers, engineers and entrepreneurs. By learning in a transdisciplinary environment, students go on to be better, more effective leaders in their professions.

When the critical-thinking and creativity skills of the designer combine with the analysis and problem-solving skills of the engineer and the planning and project-management skills of the business professional, they synthesize to form a suite of expertise that makes our students uniquely qualified to address today's real-world problems.

By bringing together design, engineering and business disciplines, Kanbar College pushes students to think beyond the boundaries of existing academic fields and focus on innovation through teamwork, collaboration and connections with industry partners while it emphasizes critical thinking and real-world problem-solving skills.

This pioneering curriculum prepares students to adapt to changes in their professions, collaborate with colleagues in other fields, and excel in jobs that exist today as well as ones that will emerge tomorrow. Students gain the knowledge and skills necessary to succeed in the 21st century workplace through real-world experience working on industry-sponsored projects.

Kanbar DEC Curriculum

The Kanbar College-wide curriculum offers intensive transdisciplinary skills development with the opportunity to practice and apply those skills in the context of students' own discipline. It includes three core courses: Finding and Shaping Opportunity, Systems Thinking and Sustainability, and Research Methods, that culminate in a fourth, integrated senior capstone project. Each course fosters collaboration among designers, engineers, and business majors giving students a breadth of expertise that goes beyond the boundaries of a traditional degree. This approach aggressively addresses changes in the 21st-century work world, where a sophisticated interdisciplinary understanding makes young professionals more effective in their own field of expertise, and enhances their ability to lead and succeed.

Finding and Shaping Opportunity

- This course introduces principles of design thinking as a key element of innovation. Students will learn how parts of traditional design process can be used to reveal opportunity, and how to shape that opportunity by critically and creatively evaluating its components

as part of a larger system. As a culminating assignment, students will work collaboratively with peers from other disciplines to create real-world value in an economic, social, and environmental context by innovating a new model for business that is both desirable and viable. This course is designated as creativity intensive.

Systems Thinking and Sustainability

- The field of sustainability will be surveyed using the lens of Systems Thinking. Students will be introduced to the rate and scale of environmental impacts resulting from climate change, our industrial food system, and waste accumulation in linear models of production, with case studies considered from multiple perspectives and disciplines. Students will develop systems models to identify key feedbacks and interactions among factors. A final team-based inquiry-driven project will involve analysis of a focal area of choice, to characterize sustainability challenges and opportunities for focused interventions, with consideration of social equity dimensions and model limitations.

Research Methods

- This writing intensive course explores a range of research tools to analyze human belief, behavior, and cultural practices, and the systems which they drive and are affected by to inform planning and critical inquiry. Students will learn to formulate appropriate research strategies and questions for conducting quantitative and qualitative research to explore a variety of approaches that address contemporary issues around all aspects of sustainability (economic, social, environmental, technical). Students will consider ethical, empathetic, and contextual sensitivities at all stages of the research process, from planning through to analysis and interpretation. They will convey their findings through multi-modal means of communication as appropriate to the content and purpose of their research.

Academic Programs

Undergraduate

- Accounting (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/accounting-bs/>)
- Animation & Digital Media (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/animation-digital-media-bs/>)
- Business Administration (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/business-management-cps-bs/>)
- Engineering (BSE) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/engineering-bse/>)
- Fashion Design (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/fashion-design-bs/>)
- Fashion Merchandising Management (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/merchandising-management-bs/>)
- Finance (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/finance-bs/>)

- Human Resource Management (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/human-resource-management-cps-bs/>)
- Industrial Design (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/industrial-design-bs/>)
- Information Technology (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/information-technology-bs/>)
- International Business (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/international-business-bs/>)
- Management (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/management-bs/>)
- Marketing (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/marketing-bs/>)
- Mechanical Engineering (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/mechanical-engineering-bse/>)
- Organizational Leadership (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/organizational-leadership-cps-bs/>)
- Textile Design (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/textile-design-bs/>)
- Textile Product Design (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/textile-product-science-bs/>)
- Visual Communication Design (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/visual-communication-design-bs/>)
- Fashion Design Technology (BS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/fashion-design-technology-bs/>)
- Fashion Merchandising Management (MS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/fashion-merchandising-management-ms/>)
- Global Textile Design (MS/MSc) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/global-textile-design-msmsc/>)
- Health Communication Design (MS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/health-communication-design-ms/>)
- Industrial Design (MS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/industrial-design-ms/>)
- Organizational Leadership (MS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/organizational-leadership-cps-ms/>)
- Strategic Leadership (DMgt) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/strategic-leadership-cps-dmgt/>)
- Taxation (MS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/taxation-ms/>)
- Textile Design (MS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/textile-design-ms/>)
- Textile Engineering & Sciences (PhD) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/textile-engineering-science-phd/>)
- Textile Technology (MS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/textile-technology-ms/>)
- User Experience & Interaction Design (MS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/user-experience-interaction-design-ms/>)

Graduate

- Advanced Biotherapeutics Manufacturing & Regulatory Affairs (MS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/jefferson-institute-bioprocessing/advanced-biotherapeutics-manufacturing-regulatory-affairs-ms/>)
- Biologics Process Engineering (PhD) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/jefferson-institute-bioprocessing/biologic-process-engineering-phd/>)
- Biopharmaceutical Process Engineering (MS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/jefferson-institute-bioprocessing/biopharmaceutical-process-engineering-ms/>)
- Business (MBA) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/innovation-masters-business-administration-mba/>)
- Engineering: Textile Concentration (MS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/engineering-textile-concentration-ms/>)
- Fashion Design Technology (MS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/fashion-design-technology-ms/>)

Certificate

- Biopharmaceutical Process Development (Graduate Certificate) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/jefferson-institute-bioprocessing/biopharmaceutical-process-development-graduate-certificate/>)
- Brand Management (Graduate Certificate) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/brand-management-graduate-certificate/>)
- Consulting (Graduate Certificate) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/consulting-cps-graduate-certificate/>)
- Diversity, Equity and Inclusion for Healthcare Leaders (Graduate Certificate) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/diversity-equity-inclusion-healthcare-leaders-cps-graduate-certificate/>)

- Effective Organizational Communications (Graduate Certificate) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/effective-organizational-communications-cps-graduate-certificate/>)
- Fundamentals of Leadership and Organizational Development (Graduate Certificate) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/fundamentals-leadership-organizational-development-cps-graduate-certificate/>)
- Healthcare Leadership (Graduate Certificate) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/healthcare-leadership-cps-graduate-certificate/>)
- Human Resource Leadership (Graduate Certificate) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/human-resource-leadership-cps-certificate/>)
- Organizational Change Management (Graduate Certificate) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/organizational-change-cps-certificate/>)
- Transformational Leadership (Graduate Certificate) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-business/transformational-leadership-cps-certificate/>)

Accelerated/Dual Degree

- Textile Design (Accelerated BS/MS) (<https://catalog.jefferson.edu/colleges-schools/kanbar-college-design-engineering-commerce-kanbar/school-design-engineering/textile-design-accelerated-bsms/>)