Cross cutting issues in BCA/PGDCA course

Computer Fundamentals

- **Professional Ethics**: Introduction to responsible use of technology; ethical issues in digital content creation and data handling.
- **Gender**: Discussions on digital gender divide and promoting inclusivity in tech access.
- **Human Values**: Cultivating digital responsibility and respectful communication.
- **SDGs**: Understanding the role of basic computing in supporting education.

---

2. Operating Systems (OS)

- **Professional Ethics**: Ethical considerations in open-source vs proprietary OS usage.
- **Environment and Sustainability**: Energy efficiency of OS systems; green computing.
- **Human Values**: Promoting fairness and collaboration in the open-source community.
- **SDGs**: Contributing to innovation and infrastructure.

---

3. Database Management Systems (DBMS)

- **Professional Ethics**: Data privacy, integrity, and ethical database design.
- **Human Values**: Sensitivity in handling personal/user data.
- **Gender**: Avoiding bias in data collection and usage.
- **SDGs**: Supporting data-driven decision-making for sustainable development (Peace, Justice, and Strong Institutions).

---

4. Programming Languages (e.g., C, C++, vb)

- **Professional Ethics**: Writing clean, maintainable, and legally compliant code.
- **Human Values**: Collaborative programming; respect for others' code and intellectual property.
- **Gender**: Promoting inclusive examples and language use.
- **SDGs**: Technology as a tool for problem-solving across various global issues.

---

5. Web Technologies

- **Professional Ethics**: Ensuring accessibility, privacy, and security in web development.
- **Gender**: Designing inclusive interfaces that cater to all users.
- **Human Values**: Promoting transparency and trust through web platforms.

- **SDGs**: Enabling education and health awareness through websites .

---

6. Software Engineering

- **Professional Ethics**: Ethics in software lifecycle management and client interaction.
- **Human Values**: Encouraging teamwork, empathy, and user-centered design.
- **Gender**: Promoting diversity in development teams and leadership roles.
- **Environment and Sustainability**: Efficient coding to reduce resource use.
- **SDGs**: Building sustainable and scalable systems.

---

7. Computer Networks

- **Professional Ethics**: Ethical use of networks; net neutrality.
- **Human Values**: Respectful and legal communication over networks.
- **Environment and Sustainability**: Power-efficient networking.
- **SDGs**: Enhancing global connectivity to bridge digital divides .