



The Local, Regional, National, and Global issues
Incorporated
in the Curriculum up till 2022-23
as Apprised in
the seventh meeting of the Academic Council
Vide **Agenda Point 7.11**

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1. Introduction of Indian Knowledge System Course (1 Credit, Audit Course) in each UG Program from 2022-23

By making a fundamental course on Indian Knowledge System, compulsory for all undergraduate programs, Quantum University took a significant step towards producing well-rounded graduates who not only excel in their chosen fields but also possess a deep appreciation of India's intellectual and cultural legacy. This initiative aligns with the university's commitment to holistic education and fostering global citizens.

The **Syllabus** of the Course is as Follows

- (i) **Survey of IKS Domains:** A broad overview of disciplines included in the IKS, and historical developments. Sources of IKS knowledge, classification of IKS texts, a survey of available primary texts, translated primary texts, translated primary texts, and secondary resource materials. Differences between a sutra, bhashya, karika, and vartika texts. Fourteen/eighteen vidyasthanas, tantrayukti.
- (ii) Introduction to Panchamahabhutas, concept of a sutra, introduction to the concepts of non-translatable (Ex. dharma, punya, aatma, karma, yagna, shakti, varna, jaati, moksha, loka, daana, itihaasa, puraana etc.) and importance of using the proper terminology. Terms such as praja, janata, loktantra, prajatantra, ganatantra, swarjya, surajya, rashtra, desh.
- (iii) **Philosophical foundations of IKS:** Introduction to Samkhya, vaisheshika and Nyaya
- (iv) **Methods in IKS:** Introduction to the concept of building and testing hypothesis using the methods of tantrayukti. Introduction to pramanas and their validity, upapatti; Standards of argumentation in the vada traditions (introduction to concepts of vaada, samvaada, vivaada, jalpa, vitanda). Concept of poorvapaksha, uttarapaksha
- (v) **Mathematics** of Madhava, Nilakantha Somayaji
- (vi) **Astronomical models** of Aryabhata
- (vii) **Wootz steel, Aranumula Mirrors, and lost wax process** for bronze castings
- (viii) **Foundational aspects of Ayurveda**
- (ix) **Foundational aspects of Ashtanga yoga**
- (x) **Foundational aspects of Sangeeta and Natya shastra**
- (xi) **Influence of IKS on the world**, knowledge exchanges with other classical civilizations, and inter-civilizational exchanges.

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Introduction of United Nations Development Program (UNDP) Course (1 Credit, Audit Course) in each UG Program from 2022-23

The course "Introduction to the United Nations Development Program (UNDP)" is a foundational course designed to provide undergraduate students at Quantum University with a comprehensive understanding of the UNDP and its critical role in global development. This course is compulsory for all undergraduate programs to ensure that students acquire essential knowledge about international development, sustainability, and the UNDP's mission and activities.

By the end of this course, students will have a profound understanding of the UNDP's role in global development, its contributions to sustainable development goals, and its impact on improving the quality of life for people around the world. This knowledge will equip them to engage in informed discussions and contribute to future efforts in international development.

Syllabus

Introduction: Introduction to UNDP, Mission and Vision of UNDP, Goals of UNDP, Structure of UNDP Executive Board and function of UNDP Board members, Expertise of UNDP, UNDP in India: Projects of UNDP in India.

Sustainable Livelihoods: Vision and Strategy for Sustainable Livelihoods: Hill Agriculture / Horticulture, Tourism and Other avenues for generating Sustainable Livelihoods. Strategies for End of hunger, achieve food security and improved nutrition and promote sustainable agriculture Promote Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for All. Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialization and Foster Innovation

Human Development: Access and explore human development data for 191 countries and territories worldwide. Ensure healthy lives and promote well-being for all at all ages, Ensure Inclusive and Equitable Quality Education and Promote Lifelong Learning Opportunities, Ensure availability and sustainable management of water and sanitation.

Social Development: Achieve Gender Equality and Empower All Women and Girls, Reduce Inequality within and Among Countries, Promote Peaceful and Inclusive Societies for Sustainable Development, Provide Access to Justice to All and Build Effective, Accountable and Inclusive Institutions at All Levels

Environmental Sustainability: Ensure access to affordable, reliable, sustainable and modern energy, Make Cities and Human Settlements Inclusive, Safe, Resilient and Sustainable, Ensure Sustainable Consumption and Production Patterns, Urgent Action to Combat Climate Change and its Impacts, Protect, Restore and Promote Sustainable Use of Terrestrial Ecosystems, Sustainably Manage Forests, Combat Desertification, and Halt and Reverse Land Degradation and Halt Biodiversity Loss.

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The Local, Regional, National and Global issues and topics Incorporated in B.Tech. Civil Engineering, Department of Civil Engineering

The department of Civil Engineering has added additional topics in important courses in the curriculum of B.Tech Civil Engineering to make it specialized for **Hill Infrastructure** (Regional) like all Weather Roads, Tunnels, Bridges, Earthquake Resistant Structures, Dams, and Canals etc The Civil Engineering does not change but the design, material management, planning construction, utilization of local resources, managing scarcity construction material, Execution of projects, preparation of site, Environment and Land Laws of Mountains are additionally taught in the program.

The Department has introduced new topics related to **local and regional hill region of Uttarakhand** in Surveying Lab, Construction Material Lab, Transportation Lab, Repair and Maintenance lab, Soil Lab, Structure Engineering Lab, Geology Lab and Environment Engineering Lab, Water Resource Engineering Lab where students can perform experiments and do hands on practices in mountains.

Similarly, in theory courses, the department has included the following for **local, regional and national region of Hills**

1. Construction Material; Management Engineering: Properties of various Construction Material; Advanced Materials, Concrete Technology, Planning; Execution in construction site, Quality; Quantity Estimation, Repair and Maintenance of Existing Structures in the **hilly area**.
2. Environmental Engineering: Waste Water Treatment, Carbon Emission and Control, Environment Laws, Water Supply, Ecology, Rain Water Harvesting in **hilly area**
3. Hydraulics Engineering: Canal Designing, River Training Works, Flood Discharge Management, Dams Design and Water Regulating Bodies in **hilly Area**
4. Structural Engineering: Analyzing and design of RCC, Steel and PSC structures in **hilly Area**
5. Transportation Engineering: Design of Highways, Roadways, Railways and Airports in hilly area There are lots of opportunities in developing nations having hilly geographic features (like Planning; Designing, Surveying, Estimation and Evaluation, Repairing; Maintenance).

Knowledge of Hill infrastructure will help students to perform better in **Hilly State Government departments like Uttarakhand, Himachal Pradesh; North East, Eastern and Western Ghats, Konkarn Railways and the similar establishments of other countries like Nepal, Afghanistan, Bhutan, Magnolia, China, Mountain states of US and Europe.**

Included Co-Curricular Activities (Beyond the Class Room)

Department organizes guest lectures from hilly construction industry experts like BRO, Uttarakhand development authorities, NHAI and CBRI etc, taking educational visits to the hilly construction sites like Dehradun (surveys, tunnels, bridges, multilevel parking, mountain residences, water storage, rainwater harvesting in mountains, smart cities in hills), Haridwar (Survey, Highways, All weather roads, Canals), Rishikesh (Water Survey, River training works), Nainital, Tehri (Various surveys, Dams and water sheds) etc. providing internships and giving training in some specialized software specially for design problems in Hilly region.

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The Local, Regional, National, and Global issues and topics Incorporated in B.Tech.(Mechanical Engineering) , Department of Mechanical Engineering

The curriculum is focused on the role of mechanical engineers towards achieving sustainable development. Critical reviews of the problems facing the development of technology were included as well as the way forward. Based on the challenges of our immediate society, the level of mechanical engineering and technology is included in teaching and curriculum is reviewed accordingly. This would not only improve the understanding in rigor in academics but hasten the rate at which problems are solved by the mechanical engineers in the society, thereby bringing sustainability.

More so, failure of engineering component is always attributed to design. This syllabus further emphasized on the need to improve the design of engineering systems to improve its sustainability while in service. The impact of the developed product is considered in terms of green technology.

Besides this the syllabus also focuses on

1. Sustainable designs to improve the design and efficiency
2. Use of bio fuels and improvement in various Engines based on it in automobile sector
3. Effective use of green energies and alternative energies for Uttarakhand regions
4. Making tools and equipments for increasing productivity and maximization of utilization of resources with minimum waste
5. Switching and consultancy to automated systems and Digital manufacturing engineering solutions for local industries

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The Local, Regional, National, and Global issues and topics Incorporated in B.Tech. (CSE), BCA and MCA Department of Computer Science & Engineering and Department of Computer Applications

Incorporating local, national, and Global issues into the B.Tech Computer Science syllabus can provide students with a more holistic and practical understanding of how technology intersects with real-world challenges in their local, national and Global Community. Here are some local issues that are integrated into the B.Tech. Computer Science syllabus:

Local and Regional Issues

Development of Apps related to Local Problems like Digital Divide, Environmental Sustainability, Healthcare Solutions, Traffic Management, Local Governance and Civic Tech etc

Some are the example which have been take as assignment to the students

- (i) Kissan App Development: App development has been taken up for in collaboration with Agriculture deptt for identification of crop diseases through pics. App will provide the instant diagnose of the disease and probable remedy of the same.
- (ii) Local Police App Development: Police App Development has been taken up for Uttarakhand
- (iii) Use of AI and Data Analytics for Local Issues: Use of AI and Data Analytics for Local Issues for reverse migration, e-health, 3D landscaping of Hills, Tourist services etc.
- (iv) Use of AI in Regional Data Analytics and Local Databases for regional development and planning

Global and National Issues

- (i) Skills development for employability: More focus on technical Skills and life skills development, twining collaborated efforts from industry to increase the employability of the students and global acceptability.
- (ii) Knowledge of Business: Many computer engineers face the problem of lack of Knowledge of Business sometime or other in their profession. Even if one is the best and most skilled programmer, Students in their jobs have to ultimately go on to lead a team of engineers, be a CTO or design data structure. However, without an understanding of how the business aspect works, one cannot understand the customers and their requirements, how to monetize products and more so the knowledge of the business aspect of computer engineering jobs is crucial. The aspects of business analytics has also been taken care of
- (iii) Awareness of Cyber Crimes and Cyber Laws: Awareness of Cyber Crimes and Cyber Laws have been incorporated to awareness. Many Internships and industrial collaborations are woven around understanding of the Cyber Security and Cyber Crime.
- (iv) Awareness of latest advancements in machine learning and AI: Awareness of latest advancement in machine learning and AI have been incorporated in electives, projects and co-curricular activities. [Go to Top](#)

The Local, Regional, National and Global issues and topics Incorporated in B.Sc. (N&D), M.Sc. (N&D) Programs in Department of Applied Medical Sciences

By incorporating these local issues into the curriculum, students in a Bachelor and Master of Science in Nutrition and Dietetics programs in Uttarakhand may develop a deeper understanding of the unique nutritional challenges and opportunities in the region. This approach not only prepares graduates to address the specific needs of the local population but also fosters a sense of responsibility and community engagement in their future careers as nutritionists and dietitians.

Local and Regional Issues

- 1. Traditional Local Diet:** Explore the traditional diet of the Uttarakhand region, including indigenous foods and ingredients unique to the area. Teach students about the nutritional value of these foods and their cultural significance.
- 2. Local Food Sustainability:** Discuss issues related to food sustainability and agricultural practices in Uttarakhand. Explore sustainable farming methods, organic agriculture, and the impact of climate change on local food production.
- 3. Nutritional Challenges:** Analyze the prevalent nutritional challenges in Uttarakhand, such as malnutrition, anemia, and vitamin deficiencies. Explore the causes and consequences of these issues, and develop strategies to address them through diet and nutrition interventions.
- 4. Community Health and Nutrition Programs:** Collaborate with local healthcare organizations and NGOs to expose students to community-based nutrition programs in Uttarakhand. Allow students to participate in or develop initiatives that target local nutrition needs.
- 5. Traditional Healing Practices:** Introduce students to traditional healing practices and herbal medicine commonly used in Uttarakhand. Discuss the role of traditional remedies in healthcare and their potential interactions with modern dietary recommendations.
- 6. Cultural Sensitivity:** Emphasize cultural sensitivity and understanding of dietary preferences and taboos in Uttarakhand. Teach students how to adapt nutrition plans to respect cultural and religious practices.
- 7. Local Ingredients in Meal Planning:** Encourage students to incorporate locally sourced ingredients into meal planning and diet recommendations. Highlight the nutritional benefits of these ingredients and their availability in the region.
- 8. Food Security:** Discuss issues related to food security in Uttarakhand, including access to nutritious food, food distribution systems, and government initiatives to address hunger and malnutrition.
- 9. Field Visits and Practicum:** Organize field visits to local communities, healthcare facilities, and nutrition centers in Uttarakhand. Provide students with hands-on experience working with individuals and families to assess their nutritional needs and provide guidance.

Incorporating both national and global issues into a Bachelor and Master of Science in Nutrition and Dietetics program will provide students with a comprehensive understanding of nutrition's broad impact and the ability to address a wide range of nutritional challenges. Here's how national and global issues integrated into the curriculum:

National Issues:

1. **Malnutrition in India:** Focus on the various forms of malnutrition prevalent in India, including undernutrition (stunting, wasting), micronutrient deficiencies, and the rising issue of overnutrition (obesity, diet-related non-communicable diseases).
2. **Government Nutrition Programs:** Explore national nutrition programs like the Integrated Child Development Services (ICDS) and the Mid Day Meal Program. Analyze their impact, challenges, and opportunities for improvement.
3. **Indian Dietary Diversity:** Study the diverse dietary habits and cultural factors that influence food choices in different regions of India. Understand how dietary patterns vary across states and communities.
4. **Food Fortification:** Discuss the importance of food fortification, particularly the fortification of staples like rice and wheat, in addressing micronutrient deficiencies in India.
5. **Traditional Indian Diets:** Examine traditional Indian diets and their nutritional value. Highlight the role of Ayurveda and traditional medicine in promoting health through dietary practices.

Global Issues:

1. **Global Nutrition Challenges:** Explore global nutrition issues such as food insecurity, access to clean water, the double burden of malnutrition (undernutrition and overnutrition), and the role of nutrition in achieving the Sustainable Development Goals (SDGs).
2. **Climate Change and Food Systems:** Discuss the impact of climate change on food production, food security, and nutritional quality. Explore sustainable dietary practices that can mitigate climate change.
4. **Food Safety and Quality Standards:** Explore international food safety regulations and quality standards. Understand the importance of ensuring safe and nutritious food for global consumers.
5. **Nutrition in Humanitarian Settings:** Examine the nutritional challenges faced by populations in conflict zones and during humanitarian crises. Learn about nutrition interventions in emergency response situations.
6. **Global Health Initiatives:** Study global health initiatives like the World Food Programme (WFP) to understand international efforts to improve nutrition.
7. **Nutrition Research and Innovation:** Explore global research in nutrition and dietetics, including innovations in food technology and healthcare delivery.
8. **Cross-Cultural Competence:** Develop cross-cultural competence by studying the dietary practices, nutrition-related health issues, and cultural factors influencing food choices in different parts of the world.

9. **Research Opportunities:** Encourage students to conduct research projects focused on local nutrition issues. This could involve surveys, data collection, and analysis of dietary habits and nutrition-related health outcomes in Uttarakhand.

10. **Guest Lecturers and Experts:** Invite guest lecturers and experts from local nutrition and healthcare organizations to share their knowledge and experiences with students.

Additionally, internships, research projects, and fieldwork opportunities will expose students to real-world applications of their knowledge and allow them to contribute to addressing both local and global nutritional challenges.

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The Local, Regional, National, and Global issues and topics Incorporated in BBA, MBA and B.Com Programs

The Department of Commerce & Finance and Department of Management has organized the strategic revision of the existing syllabus with the objective of catering and addressing the local, National and International issues. The new syllabus has been seamlessly designed for the developing the sense of social and human connection amongst the students. Departments added many of the content in the syllabus, which will help to students to emphasis the understanding the human values of the societies. During the revision of syllabus the department was very much concern to incorporate those content to address the concern. In the proposed syllabus, we added some more points, which are surely sufficing the need as follows:

- (i) **Financial Services** - Financial services are the economic services provided by the finance industry, which encompasses a broad range of businesses that manage money, including credit unions, banks, credit-card companies, insurance companies, accountancy companies, consumer-finance companies, stock brokerages, investment funds, individual and societies. (National & International)
- (ii) **Fintech**- It's a catch-all term referring to software, mobile applications, and other technologies created to improve and automate traditional forms of finance for businesses and consumers alike. (Local & National)
- (iii) **Digital Marketing**- At a high level, digital marketing refers to advertising delivered through digital channels such as search engines, websites, social media, email, and mobile apps. Using these online media channels, digital marketing is the method by which companies endorse goods, services, and brands. (Local & National)
- (iv) **GST, Taxation & E-Filing** - Filing tax returns online or e-filing as it is called, has many benefits for taxpayers. The acknowledgment of Income Tax Return (ITR) is quick. More importantly, refunds, if any, are processed faster than paper-filed returns. (Local & National)
- (v) **Human Resource Management**- Almost every course content ; particularly the last unit of every course is finished with the address of local issues like study of local population, availability of eligible candidates at local level, addressing issues at Plant level Manager to deal with local stakeholders and proper Human Resource Planning accordingly.
- (vi) **Marketing Management**- Almost every course content ; particularly the last unit of every course is finished with the address of local issues like study of local suppliers, merchants and local stakeholders including the small groups, marketing channels at local level has been addressed well in present syllabus to understand the local feel including the working of Liasioning Officer in local Plants have been given due importance during the study.

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The Local, Regional, National, and Global issues and topics Incorporated in BA (Hons) Journalism and Mass Communication, B.Sc.(Hons) VFX, Department of Media Studies

The Department of Media Studies and Design has strategically revised and restructured the current syllabus for the objective of catering and addressing of the local, national and global issues. The new syllabus has been seamlessly designed for the developing the sense of social and human connected among the students. Department added many of the content in the syllabus which will help to students to emphasis the understanding the human values of the societies.

During the revision of syllabus the department was very much concern to incorporated those content which are efficiently affecting the local, National and global issues. The nature of almost every subject in the media studies is effectively for the social and human welfare. Some illustrations are being mentioned which are clearly catering the local, national and international issues

- 1- **Current affairs**-Globalization, Economic affairs India and WTO(National and International issues)
- 2- **Print Journalism**- Local election, District administration and its function, Police functioning and redressing of complain (Practicing Journalism for Identifying the Local Issues and rising on the adequate forum)
- 3- **Media Laws**-Social Responsibilities of Press, Consumer Protection Act (Local and National Issues)
- 4- **Development Communication**-Rural Communication (Local issues)
- 5- **Radio Production-Community Radio and its Impact**, FM Radio (Local Issues)
- 6- **Specialized Reporting**- Crime reporting, Social Reporting (Local and National Issues)

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The Local, Regional, National, and Global issues and topics Incorporated in B.Sc. (Hons) Agriculture, Department of Agriculture Studies

Seeing the land condition and geopolitical scenario in Uttarakhand state, designing a Bachelor of Science in Agriculture program, it's important to consider local issues and challenges that are relevant to the region. Uttarakhand, like many other regions, has its unique agricultural landscape and concerns. Here are some local issues that have been incorporated into the program:

Local and Regional Issues

- 1. Hill Farming Techniques:** Uttarakhand is predominantly a hilly region, and hill farming presents unique challenges. The curriculum includes specialized techniques for terrace farming, contour farming, and erosion control methods suitable for hilly terrain.
- 2. Crop Diversification:** Promoting crop diversification is crucial in Uttarakhand to reduce dependency on traditional crops like rice and wheat. The program focus on introducing students to alternative crops suited for the region, such as millets, buckwheat, and quinoa.
- 3. Organic Farming and Sustainability:** Uttarakhand has a strong tradition of organic farming. The curriculum should emphasize organic farming practices, sustainable agriculture, and the use of traditional knowledge for pest and disease management.
- 4. Water Management:** Efficient water management is critical in hilly areas where water scarcity is a common issue. Teaching students about rainwater harvesting, micro-irrigation, and watershed management techniques is essential and has been incorporated.
- 5. Biodiversity Conservation:** Uttarakhand is known for its rich biodiversity. The program incorporates modules on conserving and promoting biodiversity on agricultural lands, including the cultivation of indigenous crop varieties and trees.
- 6. Climate Change Resilience:** Uttarakhand is susceptible to climate change impacts, including erratic weather patterns and extreme events. Preparing students to adapt to these changes and implement climate-resilient farming practices is a priority.
- 7. Market Linkages:** Helping students understand local and regional markets, connecting farmers with buyers, and promoting value addition to agricultural products is an integral part of the curriculum.
- 8. Government Schemes and Policies:** Keeping students updated on government schemes and policies related to agriculture, especially those specific to Uttarakhand, will empower them to access financial support and resources for their agricultural ventures.
- 9. Livestock Management:** Integrating livestock management with crop farming is common in Uttarakhand. The curriculum covers topics like integrated farming systems and animal husbandry practices suitable for the region.

10. Community Engagement and Extension Services: Encouraging students to actively engage with local farming communities and provide extension services can help bridge the gap between theoretical knowledge and practical implementation.

11. Natural Resource Management: Emphasized sustainable natural resource management, including soil conservation, and watershed protection, to ensure the long-term viability of agricultural practices in the region.

12. Traditional Knowledge: Acknowledge and incorporate traditional farming knowledge from local communities, respecting their cultural practices and wisdom.

When designing the syllabus of program, it was important to address both national and global issues that are relevant to the field of agriculture. Agriculture is a dynamic field that is influenced by various factors, including technological advancements, environmental concerns, and global market dynamics. Here are some key national and global issues that are incorporated into the program:

National Issues:

1. Sustainable Agriculture: Promoting sustainable farming practices, including organic farming, integrated pest management, and soil health management, to ensure the long-term viability of Indian agriculture.

2. Water Management: Addressing water scarcity and efficient irrigation techniques, such as drip and sprinkler systems, to maximize water use efficiency in agriculture

3. Food Security: Understanding and contributing to national food security through improved crop production, storage, and distribution systems

4. Farmers' Welfare: Focusing on the well-being of farmers, including income security, access to credit, and support systems like Minimum Support Prices (MSP) and crop insurance

5. Market Access (Indian and International) : Preparing students to navigate and leverage the diverse and evolving Indian agricultural market, including e-commerce platforms and direct marketing strategies.

6. Crop Diversity (Indian): Encouraging the cultivation of a diverse range of crops to reduce dependency on a few staple crops and enhance nutritional diversity.

7. Government Policies and Schemes (Indian): Keeping students updated on government policies, subsidies, and schemes related to agriculture, such as Pradhan Mantri Fasal Bima Yojana (PMFBY) and Kisan Credit Card (KCC).

Global Issues:

1. Climate Change and Adaptation: Understanding the global impacts of climate change on agriculture and strategies for climate-resilient farming practices.

2. International Trade and Markets: Navigating global agricultural trade dynamics, export-import policies, and international market opportunities

3. Biotechnology and GMOs: Exploring the global debate on genetically modified organisms (GMOs) and their potential impact on agriculture and food security

4. Food Safety and Quality Standards: Meeting international food safety and quality standards to access global markets and ensure the safety of agricultural products.

5. Biodiversity Conservation: Emphasizing the importance of conserving biodiversity and protecting indigenous crop varieties on a global scale

6. Smart Agriculture and Precision Farming: Incorporating the use of technology in agriculture, including precision farming, data analytics, and smart farming practices adopted worldwide.

7. Global Food Security: Examining global efforts to address food security challenges, including initiatives by organizations like the United Nations' Food and Agriculture Organization (FAO).

8. Rural Development and Poverty Alleviation: Understanding global strategies for rural development, poverty alleviation, and improving the livelihoods of small-scale farmers

9. Global Sustainability Goals: Aligning agricultural practices with international sustainability goals, such as the United Nations Sustainable Development Goals (SDGs)

10. One Health Approach: Recognizing the interconnectedness of human, animal, and environmental health and its relevance to agriculture and global health challenges

Incorporating these national and global issues into the Bachelor of Science in Agriculture program at Quantum University ensures that graduates are well prepared to address the complex and evolving challenges facing agriculture in India and contribute to global efforts in sustainable and responsible agriculture.

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The Local, Regional, National and Global issues and topics Incorporated in Law Department imparting BBA-LLB and BA-LLB

When designing a law graduation program at an Indian university, it's essential to incorporate a comprehensive understanding of legal issues at multiple levels: local, national, and global. Here are some key issues to consider:

Local and Regional Issues:

- 1. Land and Property Disputes:** Addressing the prevalent land and property disputes, particularly in rural areas, and educating students on relevant land laws, land reforms, and land acquisition issues.
- 2. Community Rights:** Exploring local issues related to community rights, land rights, and forest rights, which are critical in many parts of India, especially tribal regions.
- 3. Environmental Concerns:** Focusing on local environmental issues, such as air and water pollution, deforestation, and wildlife protection, and the corresponding legal frameworks.
- 4. Labor Laws:** Covering labor-related challenges, including informal labor markets, contract labor, and issues related to minimum wages and workers' rights.

National Issues:

- 1. Constitutional Law:** Providing a deep understanding of the Indian Constitution, its principles, amendments, and the legal implications of landmark judgments
- 2. Criminal Justice System:** Addressing issues related to the criminal justice system, including delays in trials, prison reforms, and human rights violations.
- 3. Women's Rights:** Discussing issues related to gender equality, violence against women, and the legal mechanisms in place to protect women's rights.
- 4. Commercial Laws:** Covering national commercial laws, including contract law, company law, competition law, and taxation laws that impact businesses
- 5. Human Rights:** Focusing on human rights issues, both domestically and internationally, and the legal mechanisms for protecting and promoting human rights in India
- 6. Cybersecurity and Data Privacy:** Exploring emerging issues related to cybersecurity, data protection, and privacy laws in the digital age.
- 7. India Health Law:** Considering Indian health challenges and the legal aspects of public health crises, such as pandemic response and access to healthcare
- 8. India Mercantile Law:** Considering Indian Mercantile challenges and the legal aspects of the law related to it.

Global Issues:

- 1. International Law:** Introducing students to principles of international law, including treaties, conventions, and global organizations like the United Nations.
- 2. Transnational Crimes:** Addressing global challenges such as terrorism, cybercrimes, human trafficking, and drug trafficking and the legal responses to these issues.
- 3. Trade and Intellectual Property:** Covering international trade agreements, intellectual property rights, and their impact on the Indian economy and businesses
- 4. Environmental Sustainability:** Discussing global environmental issues like climate change, biodiversity conservation, and sustainable development, and the international legal frameworks to address them
- 5. Human Rights and Refugee Laws:** Examining global human rights issues, including the rights of refugees and migrants, and the international legal instruments in place to protect them.
- 6. International Dispute Resolution:** Teaching students about international dispute resolution mechanisms, including arbitration and the International Court of Justice (ICJ)
- 7. International Humanitarian Law:** Discussing the legal framework governing armed conflicts and the protection of civilians and combatants during warfare

Incorporating these local, national, and global issues into the Law graduation program will help produce well-rounded and socially conscious legal professionals who can effectively address a wide range of legal challenges in the Indian and international contexts. It will also prepare them for a diverse array of career opportunities, including legal practice, government service, international organizations, and more.

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The Local, Regional, National and Global issues and topics Incorporated in BMRIT and BMLT Programs in Department of Paramedical Sciences

Undergraduate programs in Radiology and Imaging (BMRIT) and Medical Lab Technology (BMLT) within the paramedical department of Quantum University, it's crucial to provide students with a comprehensive understanding of the field, including local, national, and global issues. Here's are some points which incorporates these perspectives into the curriculum:

Local and Regional Issues:

- 1. Healthcare Infrastructure:** Address local healthcare infrastructure challenges, including access to radiological and pathological services in rural areas and underserved communities.
- 2. Cultural Sensitivity:** Emphasize the importance of cultural sensitivity in healthcare delivery, particularly when dealing with diverse patient populations.
- 3. Patient Privacy:** Cover state laws and regulations related to patient privacy and confidentiality, ensuring students are well-versed in ethical and legal considerations specific to the local context.
- 4. Community Health:** Introduce students to local public health issues and community healthcare programs where radiology and medical lab diagnostics play a critical role, such as disease surveillance and prevention.
- 5. Infectious Disease Management:** Highlight local infectious diseases prevalent in the region and the role of medical laboratory technologists in diagnosis, surveillance, and prevention in case of BMLT.

National Issues:

- 1. Healthcare Policies:** Explore national healthcare policies, government initiatives, and insurance systems that impact radiological and pathological services and patient care.
- 2. Quality Assurance:** Teach students about national quality assurance standards for radiological imaging, including equipment maintenance and radiation safety guidelines. Where as, in case of BMLT, to teach students about national quality assurance standards for medical laboratories, including proficiency testing, accreditation, and quality control measures
- 3. Disease Prevalence:** Discuss the prevalence of specific diseases and conditions in the country that necessitate advanced imaging techniques, such as cancer, cardiovascular diseases, and musculoskeletal disorders.
- 4. Disease Epidemiology:** Discuss the epidemiology of major diseases in the country and the role of laboratory tests in diagnosis and monitoring.

Global Issues:

- 1. International standard Radiology and Pathology Guidelines:** Incorporate global standards and guidelines for radiological and Pathology practices, ensuring students are prepared to work in a global healthcare environment.
- 2. Emerging Technologies:** Explore global trends in radiological imaging technologies, including advancements in AI, telemedicine, tele-radiology and tele-pathology.
- 3. Global Health Challenges:** Discuss global health challenges, such as pandemics, and the role of radiology in diagnosis and pathologists in surveillance, and public health responses.
- 4. Research and Collaboration:** Encourage students to engage in international research collaborations and stay updated on global research trends.
- 5. Cross-Cultural Communication:** Provide training in cross-cultural communication and intercultural competence to prepare students for interactions with patients from diverse cultural backgrounds.
- 6. Global Health Initiatives:** Introduce students to global health initiatives and organizations, like the World Health Organization (WHO), and their influence on laboratory practices and healthcare delivery.

By incorporating these local, national, and global perspectives into the undergraduate program in Radiology and Imaging and medical lab technology, the students will not only receive a well-rounded education but will also be better prepared to address the unique challenges and opportunities in the field of paramedical within their local context and on the global stage. This approach will produce highly competent and culturally sensitive professionals who contribute to improved healthcare outcomes both nationally and internationally.

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The Local, Regional, National and Global issues and topics Incorporated in B.Pharma and D.Pharma in Department of Pharmacy

Although syllabus of undergraduate program in B.Pharma (Bachelor of Pharmacy) and a D.Pharma (Diploma in Pharmacy) in the department of Pharmacy at Quantum University is adopted from the Pharmacy Council of India (PCI), It has a comprehensive understanding of the field that encompasses local, national, and global issues. PCI been incorporated these perspectives into the curriculum as follows:

Local and Regional Issues:

1. **Local Healthcare Needs:** Address local healthcare needs and challenges, including access to pharmaceutical services and medicines in rural and underserved areas.
2. **Traditional Medicine:** Explore the integration of traditional and herbal medicine practices within the local healthcare system.
3. **Community Health:** Introduce students to local public health issues and community healthcare programs where pharmacists play a critical role, such as vaccination drives and health awareness campaigns.
4. **Regulatory Compliance:** Teach students about local pharmaceutical regulations, drug registration processes, and quality control standards specific to the region.
5. **Cultural Competence:** Emphasize cultural competence when interacting with diverse patients and healthcare professionals within the local context.

National Issues:

1. **National Drug Policies:** Explore national drug policies, pricing mechanisms, and government healthcare initiatives that influence pharmacy practice and the pharmaceutical industry.
2. **Pharmacovigilance:** Discuss national pharmacovigilance programs and adverse drug reaction reporting systems.
3. **Drug Manufacturing and Quality Control:** Cover national standards for pharmaceutical manufacturing, quality control, and good manufacturing practices (GMP).
4. **Pharmacy Practice:** Address national standards for pharmacy practice, including the role of pharmacists in patient care, medication therapy management, and counseling.

5. Drug Research: Explore national pharmaceutical research initiatives, clinical trials, and opportunities for students to engage in local research projects.

Global Issues:

1. International Regulatory Framework: Incorporate global regulatory frameworks for pharmaceuticals, including the World Health Organization (WHO) guidelines and international drug classifications.

2. Global Health Challenges: Discuss global health challenges, such as pandemics and antimicrobial resistance, and the role of pharmacists in public health responses.

3. Access to Medicines: Explore global initiatives to improve access to essential medicines and address pharmaceutical disparities.

4. Pharmaceutical Supply Chain: Discuss the global pharmaceutical supply chain, including drug manufacturing, distribution, and international drug trade.

5. Pharmaceutical Research: Highlight global pharmaceutical research trends, innovations, and collaborations.

6. Ethical and Legal Considerations: Address global ethical and legal considerations in pharmacy practice, including patient privacy, informed consent, and intellectual property rights.

7. Cross-Cultural Communication: Provide training in cross-cultural communication and intercultural competence to prepare students for interactions with patients, healthcare professionals, and researchers from diverse cultural backgrounds.

By incorporating these local, national, and global perspectives into the B.Pharm and Diploma in Pharmacy programs at Quantum University, students will receive a well-rounded education. They will be better prepared to address the unique challenges and opportunities in the pharmaceutical field, whether at the local level, within the national healthcare system, or in the context of global health and pharmaceutical research. This approach can produce highly competent and culturally sensitive pharmacy professionals who contribute to improved healthcare outcomes both locally and on the global stage.

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