

## **Establishment of Proposed Research Groups at UCP**

### **Objectives**

1. Each group integrates at least two faculties (e.g., Engineering + IT, Pharma + Sciences).
2. Focused on prototyping, pilot testing, and commercialization.
3. Designed to meet societal, industrial, environmental, or health challenges etc.
4. Each group will track clear KPIs—number of prototypes, pilots, startups, legal/IP filings, policy outputs, and impact metrics.

### **Implementation Plan**

1. UCP ORIC will allocate small grants as per group's need to develop prototype and pilot.
2. Appoint co-leads from diverse departments to foster collaboration.
3. Present progress to ORIC for feedback and resource allocation.
4. KPI/Track metrics (deliverables, collaborations, patents/licenses, pilots, impact surveys).
5. Provide top-performing groups access to incubation support, external investment, and product commercialization services.

### **Proposed Groups Names with Objectives for each Faculty**

#### **1. Faculty of Engineering (FOE)**

**Group Name:** Smart Sustainable Engineering & Prototype Development (SSEPD)

**Objectives:**

- Design and prototype energy-efficient, low-cost solutions (e.g., solar cooling, water purification).
- Collaborate with Sciences and IT on IoT-enabled smart systems.
- Validate products through field trials.

#### **2. Faculty of Information Technology & Computer Science (FOIT&CS)**

**Group Name:** Data-Driven Systems & Applied AI Research (DDSAIR)

**Objectives:**

- Build AI/ML products for health diagnostics, education, or industry maintenance etc.
- Partner with Engineering for edge-computing devices.
- Develop and pilot chatbot/mobile apps for community services.

#### **3. Faculty of Sciences & Technology (FOST)**

**Group Name:** Applied Biosciences & Green Innovation (ABGI)

**Objectives:**

- Translate lab research into products: biofertilizers, waste-remediation, biopharmaceuticals, food products, body care products etc.
- Collaborate with Engineering/IT for sensor-based environmental monitoring.
- Engage with Pharmacy/Agri stakeholders for product testing and scale-up.

#### **4. Faculty of Management Sciences (FOMS)**

**Group Name:** Innovation Business Incubation & Impact (IBI<sup>2</sup>)

**Objectives:**

- Develop commercialization frameworks and viable business models for ORIC projects.
- Provide mentorship on marketing, financial planning, and regulation.
- Offer student/faculty startups accelerator and investor pitch support.
- Develop Shariah-compliant fintech models and digital financial tools that enhance financial inclusion, ethical investment, and socio-economic empowerment.

## **5. Faculty of Pharmaceutical Sciences (FOPS)**

**Group Name:** Translational Pharma & Clinical Innovation Research Team (TP-CIRT)

**Objectives:**

- Advance natural/plant-based drug leads, nutraceuticals, and formulation prototypes.
- Integrate Sciences/Engineering for controlled-release and nano-delivery systems.
- Facilitate preclinical testing in collaboration with hospitals and diagnostics labs.

## **6. Faculty of Humanities & Social Sciences (FOHSS)**

**Group Name:** Society-Centric Innovation & Policy Impact (SCIPI)

**Objectives:**

- Bridge social research with technology and public policy, focusing on how emerging technologies impact behavior, ethics, and society.
- Co-develop community-based interventions using data, storytelling, and behavioral insights.
- Evaluate the social acceptability and equity of UCP-developed products (AI tools, health innovations, educational platforms, etc.).

## **7. Faculty of Media & Mass Communication (FOMMC)**

**Group Name:** Media-Enabled Innovation & Outreach Studio (MEIOS)

**Objectives:**

- Create interactive media campaigns demonstrating ORIC-led technologies.
- Develop AR/VR/AI media prototypes for training, awareness, and product launch.
- Measure outreach impact by tracking engagement, adoption, and feedback metrics.
- Design AI-driven frameworks for detecting, analyzing, and countering misinformation in digital media

## **8. Faculty of Law (FOL)**

**Group Name:** Innovation Law & IP Policy (ILIP)

**Objectives:**

- Provide legal support on patents, commercialization agreements, licensing.
- Research legal frameworks and digital regulation for startups and tech products.
- Conduct policy workshops, publish white papers, and industry-legal partnerships.
- Governance of Artificial Intelligence in Pakistan's socio-economic and judicial systems.

## **9. Faculty of Languages & Literature (FOLL)**

**Group Name:** Digital Literacies & Cultural Intelligence (DLCI)

**Objectives:**

- Explore the intersection of language, technology, and media to enhance public communication, digital literacy, and cultural narratives.
- Develop content tools and multilingual platforms (e.g., voice interfaces, educational apps) in collaboration with IT and Media faculties.
- Promote indigenous knowledge and cultural branding through creative writing, storytelling, and translation research.

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