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Wearable Tech Learning Pathway & Progress Log

Initial Proposed Document | Version 1.0

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Name: _____

Course: _____

Year: _____

Contents

Welcome to Wearable Tech!

This document is your guide to success in your wearable technology project. It will help us create a customised learning plan, track your progress, and ensure you make the most of the resources and support available to you.

The aim is to give you the confidence to explore independently while knowing that we have clear, agreed-upon goals and support structures in place. This document will also serve as a log to track your learning journey, making it easier for you to demonstrate your progress to your academic team.

How This Document Works

Book a Consultation
Schedule an initial consultation with the technician to get started on your journey.

Part 1 – Self-Filled: Before your consultation, complete the "Initial Project Brief" section. This will give you an opportunity to outline your project goals, ideas, and inspirations.

Part 2 – Technician Consultation: During your consultation, you'll collaborate with the technician to complete the "Technical Planning & Support Framework." Together, you'll outline the technical aspects of your project, including workshops, tutorials, and resources that will help you succeed.

Part 3 – Project Log Sheets: This section is an **ongoing record** of your work. Fill it out after each significant session, and work with the technician to document progress and feedback.

Resources Available

Workshops: A variety of scheduled sessions are available to build your skills. From **soldering** to **3D modelling**, these workshops are tailored to equip you with essential techniques.

Online Guides & Tutorials: Access step-by-step instructions, videos, and walkthroughs for common techniques and challenges. Check out the skills and guides page at lcfdll.com

Equipment & Facilities: Our lab is equipped with state-of-the-art tools, including 3D printers, soldering stations, and wearables-focused kits. Check out all of our main equipment here.

Technician Support: Book 1-to-1 sessions for personalised guidance on complex or challenging areas. Bookings are available on lcfdll.com or by clicking here.

Peer Support Groups: Scheduled group sessions tackling shared and common challenges.

Part 1: Initial Project Brief

This section is where you independently define your project.

Think of it as the foundation for everything you will build. Take your time to complete this thoughtfully—it will help us create a learning plan tailored to your goals and needs.

Project Overview

1. What is your project about?

Write a brief summary of your project in one or two sentences. This should describe the main purpose or idea behind your work.

Example:
"I'm creating a wearable device that monitors heart rate and displays the data using LEDs."

2. What problem does your project solve, or what purpose does it serve?

Is it practical, aesthetic, or conceptual? How do you see it being used in the real world or your field of study?

3. What will your project look like or do when it's finished?

Describe the final outcome in as much detail as you can. For example, will it be an interactive garment, an accessory, a functional prototype?

Personal Connection

4. Why is this project important to you?

Think about your personal motivations. Does it align with your interests, career goals, or a topic you're passionate about?

5. What inspired you to start this project?

Were there particular designers, artists, technologies, or problems that sparked your idea? Feel free to mention books, projects, or personal experiences!

6. How does this project reflect your creative or technical identity?

Is this project an opportunity to try something new, or does it build on skills or concepts you've already explored? Are there any aspects you're particularly excited to explore or alternatively aspects that you are dreading?

Creative Exploration

7. Have you done any research or sketches for your project?

If yes, attach or describe them here. If no, what will your next steps be to start exploring your idea?

8. What materials, specifications or design elements are you considering?

E.g., fabrics, sensors, lighting, connectors, enclosures, zips

9. Are there any designers, brands, or work that has inspired this project?

List a few names or examples that influence your idea. Think broadly—it could be from art, fashion, technology, or other fields.

Early Planning

10. What stage is your project at right now?

- ☐ Idea Stage – I have a concept, but it's not fully formed.
- ☐ Planning Stage – I'm researching and making decisions about how to proceed.
- ☐ Prototyping Stage – I've started building or testing parts of my project.
- ☐ Refinement Stage – I'm working on final details.

11. What's your biggest question or challenge right now?

This could be technical, creative, or even about managing your time.

Project Goals

12. What do you hope to learn by completing this project?

Think about skills, techniques, or concepts.

13. What does success look like to you for this project?

It could be finishing on time, learning something new, or creating something you're proud of.

Student Pledges

By signing below, you agree to the following:

Engagement

- I will do my best to engage actively with assigned readings, tutorials, and videos independently to prepare for face-to-face sessions and agreed upon goals.
- I will attend relevant workshops to support my learning.
- I am responsible for my own time management and making sure my project is completed by the deadline.
- If I am unable to attend a workshop or tutorial, I will contact the technician to let them know, so they can manage their time effectively.

Log Sheet Commitment:

- I will do my best to keep my log sheets current to track my progress.

Health & Safety:

- I will follow all health and safety guidelines, including wearing appropriate PPE and completing required inductions (e.g., soldering, lab bench power supply).

Equipment Use:

- I will respect the lab's equipment policy. I pledge to return, replace, or purchase any equipment used for my project, in agreement with the technician.

Collaboration:

- I will work collaboratively and respectfully with my technician and peers, and I will actively contribute to making this a positive and productive environment.

Student Signature: _____ **Date**: ____/____/_____

Part 2: Technical Planning & Support Framework

This section is completed during your initial consultation with the technician, but you can prepare ahead by reviewing and reflecting on the questions below. These steps will guide our discussion and help create a clear plan for your project.

Flowchart: Visualising Your Project

To kick off your technical planning, we'll create a flowchart that outlines how your project works or the participant journey it delivers. This will help us understand how all the pieces of your project fit together and identify areas where you may need extra support. For an example click here.

Why a Flowchart?

- It helps you think about the "big picture" of your project.
- It breaks your project into manageable, logical steps.
- It creates a visual reference for how different components interact.

What Should the Flowchart Cover?

- **How your project works**: What happens when it's in use?
- **The user journey**: What does the user do, and how does the project respond?
- **Key stages**: Where do major actions, decisions, or processes occur?

How to Create Your Flowchart

- If you feel confident, feel free to create a draft of your flowchart before the consultation. I recommend the website Draw.io or sketch it on paper.
- Alternatively, we can create the flowchart together during the consultation. Don't worry if you're not sure where to start—that's what I'm here to help with!
- For guidance on creating a great flowchart, refer to "How To Make A Great Flowchart" in the wearable tech skills & guides on SharePoint.

Flowchart: Visualising Your Project

Place your flowchart on this page. Don’t worry if you think it’ll need to be updated in the future.

Skills Assessment

Let's evaluate your current technical skill set. This will help us plan what workshops or additional resources will best support your learning.

What is your current experience with the following?

(Rate your confidence on a scale of 1-5, where 1 = No Experience and 5 = Confident)

Skills	Score
Programming (e.g., Arduino, Python)	/ 5
Electronics (e.g., soldering, wiring, using sensors)	/ 5
Electronic Tools (e.g., Lab Bench Power Supply, Multimeter)	/ 5
Digital Prototyping (e.g., CAD, Fusion360, EasyEDA)	/ 5
Physical Prototyping (e.g., 3D printing, laser cutting, physical assembly)	/ 5
Wearable design (e.g., sewing, working with textiles)	/ 5

Note: Please answer this honestly and don't be concerned if your scores are low or all 1.
No prior experience is expected or needed, and everyone is treated equally.

Are there any specific skills or tools you're particularly keen to learn?

Example: "I want to learn how to solder" or "I need to understand how to program RGB LEDs."

Equipment & Resource Planning

Let's identify the tools, materials, and resources you'll need to bring your project to life. This includes lab equipment, consumables, and any specialised components that may require sourcing or purchasing. Planning ahead ensures you have everything you need at each stage.

What equipment or tools do you anticipate needing for this project?

Examples: microcontrollers, sensors, sewing machines, fabric, LEDs

Equipment Needed	Tick If Sourced
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Note: The Digital Learning Lab has a wide range of equipment that you are welcome to use. However, if you plan to keep any equipment you will need to purchase it from us at cost price. You are welcome to replace it with like-for-like, or simply returning it to us in a reusable state*.

Are there any tools or materials you are unsure about using?

Do you require a soldering induction?

(Technician to sign off if induction is required and completed.)

☐ Yes – I would like/need to do soldering.

☐ No – I don't need to any soldering.

Note: Please note jewellery soldering is not the same as electrical soldering. Unfortunately, even if you have learned soldering on your own or at a different institution or course, you are still required to complete an induction to comply with UAL's Health and Safety policies which may be site and equipment specific.

Technician Soldering Sign-Off:

Once signed off you are welcome to use the Digital Learning Lab's soldering bench freely within opening hours as long as there is a technician present in the room and complying with all aspects raised within the induction.

Technician Signature: _____ **Date**: ____/____/_____

Scheduled Workshops

We offer a large and comprehensive set of workshops designed to teach you key technical skills and pipelines. Together, we'll highlight the ones most relevant to your project. Workshops can be booked at workshops.lcfdll.com, and are a great place to start.

Wearable Tech Workshops	To Attend	Order	Attended
Introduction to Wearable Technology & Physical Computing	☐	[ ]	☐
Advanced Wearable Technology & Physical Computing	☐	[ ]	☐
Exploring AI/LLM's for Wearable Tech & Physical Computing	☐	[ ]	☐
Conductive Materials for Interactive Wearables	☐	[ ]	☐
Lighting & Projection Mapping in Wearable Technology	☐	[ ]	☐
Circuit Prototyping with the Voltera-One Rapid PCB Machine	☐	[ ]	☐
Introduction to Robotics	☐	[ ]	☐
Introduction to The Internet of Things (IOT)	☐	[ ]	☐
CAD/CAM in 3D Modelling for Circuit Enclosures	☐	[ ]	☐
Interactive Wearables X TouchDesigner	☐	[ ]	☐

Workshop Action Plan

(Technician and student to set a timeline for attending workshops.)

Example: “Attend the Basic Electronics workshop before next consultation.”

1-to-1 Support Needs

Some aspects of your project may require more in-depth support. Use this section to outline areas where you’ll need targeted 1-to-1 sessions.

Which aspects of your project do you need the most help with? You are responsible for keeping on top of and organising / booking any 1-to-1 support. ***Note****: end of term gets exceptionally busy and as a result may not be able to facilitate 1-to-1 support.*

Topics for 1-to-1 Support	**Date Booked**
Example: “I’m unsure how to assemble the final wearable piece.”	__ / __ / __
Example: “I need help programming a motion sensor to control LEDs.”	__ / __ / __
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Tutorials & Specialised Resources

This section focuses on the tailored learning materials that will help you tackle the more challenging aspects of your project. From pre-made guides to video tutorials, these resources are designed to build your confidence and expand your skills step by step.

Are there any tutorials, guides, or example projects to explore?

(Technician to recommend and assign resources from available materials.)

Tutorials / Guides	**Completed?**
Example: "Using a Microphone with a Raspberry Pi"	☐
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***Note**: Digital Learning Lab has an extensive and tailored range of online tutorials, guides and projects to help teach context specific concepts and ideas. However, sometimes we may recommend external sources when a knowledge gap is identified.*

Timeline & Milestones

Mapping out your timeline and setting key milestones will help keep your project on track. This section is about breaking your work into manageable steps, with clear deadlines to stay organized and motivated.

When is your project deadline?

This is your absolute final hand-in date.

Date: ____/____/_____

Note: It is your responsibility to meet course deadlines. If you are concerned you will not be able to complete in time speak to the technician to see how the project can be adapted.

When would you like to complete the project?

This is your personal target date to meet documentation targets etc.

Date: ____/____/_____

Note: It is your responsibility to meet course deadlines. If you are concerned you will not be able to complete in time speak to the technician to see how the project can be adapted.

What are your short-term goals?

Set 1-2 tasks to complete before the next consultation.

Personal Goals / Targets	**Completed?**
Example: "Set-up a Raspberry Pi ready for use"	☐
Example: "Complete tutorial x, y & z"	☐
	☐
	☐
	☐
	☐
	☐
	☐

What are your long-term goals?

Set broader goals for completing the project.

Personal Goals / Targets	Done?	Target Date
Example: "1st attempt at an enclose design designed & printed"	☐	__ / __ / __
Example: "Test different lighting combinations and choose my final config"	☐	__ / __ / __
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How will we track your progress?

Example: "Update log sheets weekly and review progress during consultations."

Part 3: Project Log Sheets

This section is to be completed regularly throughout your project. They are intended to help you keep your project on time and identify problems before they arise.

How to Use the Log Sheets

The project log sheets are designed to help you track your progress throughout your project, document challenges, and record key learning moments. They also allow the technician to provide feedback and document any additional support given. Keeping these sheets up to date will help you reflect on your work and demonstrate your progress when presenting your project to your academic team. You can download a blank log sheet here, or collect them from the Lab.

- **Student Section:** Fill out your portion of the log sheet after each significant work session. This might be after completing a workshop, a 1-to-1 session, or independent work on your project.
- **Technician Section:** The technician will document their observations and any additional guidance provided during 1-to-1 sessions or consultations. Remember there is only one technician, and lots of students so please bring spare sheets with you and remind the technician if they have been caught up helping other students.

By working together on these sheets, we'll ensure a clear and collaborative record of your project's development.

Tips for Success

- **Consistency**: Try to fill out your section of the log sheet promptly after each session.
- **Honesty**: Don't shy away from noting challenges / difficulties—they're a key part of learning!
- **Review**: Use your log sheets to prepare for follow-up sessions and reflect on your project as it continues to evolve.

By maintaining these log sheets, you'll create a comprehensive record of your journey from start to finish. This will not only help with academic assessments but also enhance your confidence as you see how far you've come.

Project Log Sheet

Date: ____/____/_____

Work Session Type: Workshop / 1-to-1 / Independent

Goals for the Session

Example: “Learn how to solder wires to connectors.”

What Was Achieved?

Example: “Successfully soldered two connectors; struggled with overheating wires initially but resolved with practice.”

Challenges Faced or Questions Raised?

Example: “Difficulty holding wires steady; need to learn about using helping hands.”

Next Steps:

Example: “Practice soldering; attend ‘Circuit Design Basics’ workshop.”

Technician Comments or Feedback:

“Great progress on soldering. Recommend a tutorial on handling heat-sensitive components.”