**แบบฟอร์มเสนอหัวข้อโครงงานเทคโนโลยีอุตสาหกรรม**

**ชื่อโครงงาน**

(ภาษาไทย)........................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................

(ภาษาอังกฤษ)..................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................

**ชื่ออาจารย์ที่ปรึกษา**

1. ............................................................................................................................ประธานที่ปรึกษา
2. ............................................................................................................................ที่ปรึกษาร่วม (ถ้ามี)

**ชื่อนักศึกษา**

1. ...................................................................................รหัส..........................................................................

สาขาวิชาเทคโนโลยีอุตสาหกรรม แขนงวิชา....................................................................................................

2. ...................................................................................รหัส..........................................................................

สาขาวิชาเทคโนโลยีอุตสาหกรรม แขนงวิชา....................................................................................................

คณะวิทยาศาสตร์และเทคโนโลยี สถาบันเทคโนโลยีปทุมวัน

**คำสำคัญ** (ภาษาไทย) 3 – 5 คำ

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

**คำสำคัญ** (ภาษาอังกฤษ) 3 – 5 คำ

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

**บทนำ**.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

**หลักการและเหตุผลของโครงงาน**

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

.........................................................................................................................................................................

**วัตถุประสงค์ของโครงงาน** (ต้องวัดและประเมินผลได้)

1. ....................................................................................................................................................................

2. ....................................................................................................................................................................

3. ....................................................................................................................................................................

4. ....................................................................................................................................................................

5. ....................................................................................................................................................................

**ขอบเขตของโครงงาน** (ต้องสอดคล้องกับวัตถุประสงค์ของโครงงาน)

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

**วิธีการดำเนินงานของโครงงาน** (ต้องสอดคล้องกับขอบเขตของโครงงาน)

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

..........................................................................................................................................................................

**แผนปฏิบัติงานในการดำเนินงานของโครงงาน** (ต้องสอดคล้องกับวิธีการดำเนินงานของโครงงาน)

|  |  |  |
| --- | --- | --- |
| **ลำดับ** | **รายการ** | **ระยะเวลา** |
| **พ.ย.2563** | **ธ.ค.2563** | **ม.ค.2564** | **ก.พ.2564** | **มี.ค.2564** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**ผลที่คาดว่าจะได้รับ** (ต้องสอดคล้องกับวัตถุประสงค์)

1. ....................................................................................................................................................................

2. ....................................................................................................................................................................

3. ....................................................................................................................................................................

4. ....................................................................................................................................................................

5. ....................................................................................................................................................................

**เอกสารอ้างอิง** (ไม่เกิน 5 เรื่อง และการเขียนอ้างอิงใช้รูปแบบ APA Style 6th edition)

1. ....................................................................................................................................................................

2. ....................................................................................................................................................................

3. ....................................................................................................................................................................

4. ....................................................................................................................................................................

5. ....................................................................................................................................................................