# ALLEGATO 1

## Scheda progetto

<table>
<thead>
<tr>
<th>Posti</th>
<th>N. 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progetto</td>
<td>DARE – DIGITAL LIFELONG PRECENTION</td>
</tr>
<tr>
<td>CUP</td>
<td>B53C22006460001</td>
</tr>
<tr>
<td>S.C.</td>
<td>01/B1 - INFORMATICA</td>
</tr>
<tr>
<td>S.S.D.</td>
<td>INF/01 - INFORMATICA</td>
</tr>
</tbody>
</table>

**Sede di svolgimento dell’attività di ricerca:**
Dipartimento di Matematica e Informatica

**Struttura di svolgimento dell’attività didattica:**
Dipartimento di Matematica e Informatica

### Impegno scientifico

Attività di ricerca coerenti con il settore scientifico disciplinare INF/01 per lo svolgimento delle seguenti attività previste nel **Progetto DARE**:

**Spoke 1 - ENABLING FACTORS AND TECHNOLOGIES FOR DIGITAL PREVENTION:**
Lowering and breaking down barriers for adopting innovative, sustainable, high quality, and effective digitally enabled solutions for prevention. The overall objective is to co-create with stakeholders a personalized prevention roadmap for future healthcare that incorporates digital solutions along the entire prevention path.

**WP4 - Technology and Analytics:** the aim is to identify, develop, adapt, and personalize the enabling technologies.

**Task 4.1 - HPC, HPDA, Cloud, and Edge computing.** This task identifies, adapts, and develops computing solutions that are functional to the requirements and needs of the pilots in spoke 2 and spoke 3. This task will work on both on-premise and cloud-based solutions exploiting the three models of SaaS, PaaS, and IaaS. This task will develop software interfaces and integration strategies, in agreement with the specifications defined in Task 3.1, to ensure the solution's successful deployment in spoke 2 and spoke 3.

**Task 4.2 – Model integration and deployment.** The success of a machine learning (ML) model, and data-driven methods in general, does not consist exclusively of its accuracy but depends on its integration with non-ML software as part of a sizeable ML-based system. This task aims at defining effective approaches for transitioning ML models, developed by data scientists in Task 4.3, into ML-based software systems, focusing on MLOps and online testing to assure the quality of both data and models after being deployed online.

**Task 4.3 - Data Mining, AI, ML, Deep Learning, big data analytics.** This task will identify/adapt/develop data-driven tools and methods used in the pilots in spoke 2 and spoke 3, including descriptive and predictive analytics. To overcome the issue of the black-box nature of ML models, both generic and modelling-specific explainable methods will be used whenever relevant. AI-based (semantic) indexing of entities and relations in the data will be developed for the extraction of patterns and correlations, including aid in the searching, browsing, retrieval, and explanation of information to demonstrate tangible value and improved usability of health data for end-users.

### Impegno didattico

Disciplinare e Attività formative da svolgere nell’ambito del progetto DARE

**Numero di pubblicazioni:** Numero Massimo di 12

**Lingua straniera:** Inglese