

# INFS1200 — Introduction to Information Systems

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Semester 1, 2026 (23/02/2026 - 20/06/2026), St Lucia, in person. Information systems analysis, design and implementation, relational database technology, data modelling, data querying using SQL, and building a small-scale information system using a relational DBMS.

## Staff

- **A/Prof Archie Chapman** — course coordinator & lecturer
- **A/Prof Hassan Khosravi** — lecturer
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## Learning outcomes

- **LO1** Extract information systems requirements to create basic conceptual models
- **LO2** Map basic conceptual data models to relational database schema
- **LO3** Express natural language queries correctly using the SQL language
- **LO4** Reason with the logical foundations of the relational data model and the fundamental principles of correct relational database design
- **LO5** Explain key security concepts related to database control measures and SQL injection

- **LO6** Construct a small-scale information system in a relational database management system

## Course learning activities

- **Lectures** — weeks 1-13, introduce concepts/techniques for information systems analysis and DBMS design.
- **Applied classes** — weeks 2-13, practice the techniques introduced in lectures.
- **Practicals** — hands-on experience developing/implementing a small-scale information system in a relational DBMS and practicing SQL.
- **RiPPLE personalised learning activities** — 12 weekly rounds (answering, generating and reviewing instructor/peer-generated questions), best 10 of 12 count toward the mark.

## Assessment

| Component                                        | Weight | Due                                                                                          |
|--------------------------------------------------|--------|----------------------------------------------------------------------------------------------|
| Weekly RiPPLe activities<br>(best 10 of 12)      | 10%    | Weekly, Fri 4pm from week 2 to week 13 (week 6 exception: Thu 2/04/2026)<br>2/04/2026 5:00pm |
| Assignment 1 (ER models + relational data model) | 25%    |                                                                                              |
| Assignment 2 — SQL code submission (hurdle)      | 25%    | 8/05/2026 5:00pm                                                                             |
| Assignment 2 — SQL interview (pass/fail hurdle)  | —      | 19-21/05/2026 (week 12 Applied Classes/Practicals)                                           |
| Final exam (hurdle)                              | 40%    | End of semester exam period, 6/06/2026 - 20/06/2026                                          |

- Must pass the Assignment 2 interview to be eligible for >50% on Assignment 2.
- Must pass the final exam ( 50/100) to pass the course overall — a failed exam caps the total mark at 49 (grade 3), and caps it further at 47 (grade 2) if the exam mark is also below 40%.
- Final exam: 120 minutes + 10 minutes planning time, closed book except one A4 double-sided sheet of notes, no calculators, in-person invigilated.

## Lectures

- 2026-02-23-conceptual-database-design-and-the-er-model<sup>1</sup>

<sup>1</sup>courses/infs1200/2026-02-23-conceptual-database-design-and-the-er-model.pdf

- [2026-03-02-weak-entities-the-eer-model-and-design-choices](#)<sup>2</sup>
- [2026-03-09-the-relational-model-and-integrity-constraints](#)<sup>3</sup>
- [2026-03-16-er-to-relational-mapping](#)<sup>4</sup>
- [2026-03-30-basic-sql-ddl-and-dml](#)<sup>5</sup>
- [2026-04-06-aggregation-grouping-and-multiple-relation-queries](#)<sup>6</sup>
- [2026-04-13-nested-queries-views-and-generative-ai](#)<sup>7</sup>
- [2026-04-27-database-design-guidelines-and-functional-dependencies](#)<sup>8</sup>
- [2026-05-04-normalisation-and-relational-database-schema-design](#)<sup>9</sup>
- [2026-05-11-database-security](#)<sup>10</sup>

## Reference / concept notes

- [er-diagram-notation](#)<sup>11</sup>
- [relationship-constraints](#)<sup>12</sup>
- [relational-mapping-notation](#)<sup>13</sup>

## Exercises

- [week1-lab-practical-1-course-tools](#)<sup>14</sup>
- [week2-tutorial-applied-class-1-intro-to-dbms-and-basic-erd](#)<sup>15</sup>
- [week3-tutorial-applied-class-2-entity-relationship-diagrams](#)<sup>16</sup>
- [week2-tutorial-case-study-1-dirt-road-driving](#)<sup>17</sup>
- [week4-tutorial-applied-class-3-relational-integrity](#)<sup>18</sup>
- [week5-tutorial-applied-class-4-entity-relationship-mapping](#)<sup>19</sup>
- [week3-tutorial-case-study-2-dirt-road-driving](#)<sup>20</sup>

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<sup>2</sup>[courses/infos1200/2026-03-02-weak-entities-the-eer-model-and-design-choices.pdf](#)

<sup>3</sup>[courses/infos1200/2026-03-09-the-relational-model-and-integrity-constraints.pdf](#)

<sup>4</sup>[courses/infos1200/2026-03-16-er-to-relational-mapping.pdf](#)

<sup>5</sup>[courses/infos1200/2026-03-30-basic-sql-ddl-and-dml.pdf](#)

<sup>6</sup>[courses/infos1200/2026-04-06-aggregation-grouping-and-multiple-relation-queries.pdf](#)

<sup>7</sup>[courses/infos1200/2026-04-13-nested-queries-views-and-generative-ai.pdf](#)

<sup>8</sup>[courses/infos1200/2026-04-27-database-design-guidelines-and-functional-dependencies.pdf](#)

<sup>9</sup>[courses/infos1200/2026-05-04-normalisation-and-relational-database-schema-design.pdf](#)

<sup>10</sup>[courses/infos1200/2026-05-11-database-security.pdf](#)

<sup>11</sup>[courses/infos1200/er-diagram-notation.pdf](#)

<sup>12</sup>[courses/infos1200/relationship-constraints.pdf](#)

<sup>13</sup>[courses/infos1200/relational-mapping-notation.pdf](#)

<sup>14</sup>[courses/infos1200/week1-lab-practical-1-course-tools.pdf](#)

<sup>15</sup>[courses/infos1200/week2-tutorial-applied-class-1-intro-to-dbms-and-basic-erd.pdf](#)

<sup>16</sup>[courses/infos1200/week3-tutorial-applied-class-2-entity-relationship-diagrams.pdf](#)

<sup>17</sup>[courses/infos1200/week2-tutorial-case-study-1-dirt-road-driving.pdf](#)

<sup>18</sup>[courses/infos1200/week4-tutorial-applied-class-3-relational-integrity.pdf](#)

<sup>19</sup>[courses/infos1200/week5-tutorial-applied-class-4-entity-relationship-mapping.pdf](#)

<sup>20</sup>[courses/infos1200/week3-tutorial-case-study-2-dirt-road-driving.pdf](#)

- week4-tutorial-case-study-3-dirt-road-driving<sup>21</sup>
- week6-tutorial-applied-class-5-basic-sql-ddl-and-dml<sup>22</sup>
- week6-tutorial-case-study-4-easydrive-insurance<sup>23</sup>
- week7-tutorial-applied-class-6-aggregation-and-grouping<sup>24</sup>
- week7-tutorial-case-study-5-easydrive-insurance<sup>25</sup>
- week8-tutorial-applied-class-7-multiple-relation-queries<sup>26</sup>
- week9-tutorial-applied-class-8-nested-queries-and-views<sup>27</sup>
- week10-tutorial-applied-class-9-functional-dependencies<sup>28</sup>
- week10-tutorial-case-study-8-dirt-road-driving<sup>29</sup>
- week11-tutorial-applied-class-10-normalisation-bcnf-3nf-synthesis<sup>30</sup>
- week11-tutorial-case-study-9-payroll-system<sup>31</sup>
- week12-tutorial-5-1-database-security<sup>32</sup>

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<sup>21</sup>courses/infs1200/week4-tutorial-case-study-3-dirt-road-driving.pdf

<sup>22</sup>courses/infs1200/week6-tutorial-applied-class-5-basic-sql-ddl-and-dml.pdf

<sup>23</sup>courses/infs1200/week6-tutorial-case-study-4-easydrive-insurance.pdf

<sup>24</sup>courses/infs1200/week7-tutorial-applied-class-6-aggregation-and-grouping.pdf

<sup>25</sup>courses/infs1200/week7-tutorial-case-study-5-easydrive-insurance.pdf

<sup>26</sup>courses/infs1200/week8-tutorial-applied-class-7-multiple-relation-queries.pdf

<sup>27</sup>courses/infs1200/week9-tutorial-applied-class-8-nested-queries-and-views.pdf

<sup>28</sup>courses/infs1200/week10-tutorial-applied-class-9-functional-dependencies.pdf

<sup>29</sup>courses/infs1200/week10-tutorial-case-study-8-dirt-road-driving.pdf

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<sup>32</sup>courses/infs1200/week12-tutorial-5-1-database-security.pdf