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| COURSE: Elements of Critical Software | | |
| MASTER: Master in Aeronautical Engineering | YEAR: 2014 / 2015 | TERM: |

| WEEKLY PLANNING | | | | | | | | | |
|-----------------|---------|--|--------------------|----------|---|--|---|-------------|--|
| WEEK | SESSION | DESCRIPTION | GROUPS (mark X) | | SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room) | Indicate YES/NO If the session needs 2 teachers | WEEKLY PROGRAMMING FOR STUDENT | | |
| | | | LECTURES | SEMINARS | | | DESCRIPTION | CLASS HOURS | HOMEWORK HOURS (Max. 7h week) |
| 1 | 1 | <ul style="list-style-type: none"> • Elements of Critical Software Introduction. • Introduction to RTCA DO-178B. | X | | | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> ○ Practice Description. ○ Subject Slides. - Study and personal work. | 1,67 | 2 |
| 2 | 2 | <ul style="list-style-type: none"> • Introduction to RTCA DO-178C. • SW Architectures Description. | X | X | | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> ○ Practice Description. ○ Subject Slides. - Study and personal work. | 1,67 | 2 |

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| 3 | 3 | <ul style="list-style-type: none"> • Low Level Programming. • Real-Time Operating Systems. | X | | | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> ○ Practice Description. ○ Subject Slides. - Study and personal work. | 1,67 | 2 |
| 4 | 4 | <ul style="list-style-type: none"> • SW Requirements Management Practice. | | X | Lab | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> ○ Practice Description. ○ Subject Slides. - Study and personal work. | 1,67 | 2 |
| 5 | 5 | <ul style="list-style-type: none"> • SW Design. | X | | | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> ○ Practice Description. ○ Subject Slides. - Study and personal work. | 1,67 | 2 |
| 6 | 6 | <ul style="list-style-type: none"> • SW Design Practice. | | X | Lab | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> ○ Practice Description. ○ Subject Slides. - Study and personal work. | 1,67 | 2 |
| 7 | 7 | <ul style="list-style-type: none"> • SW Design Practice. | | X | Lab | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> ○ Practice Description. ○ Subject Slides. - Study and personal work. | 1,67 | 2 |
| 8 | 8 | <ul style="list-style-type: none"> • SW Implementation. Theory & Practice. | | X | Lab | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> ○ Practice Description. ○ Subject Slides. - Study and personal work. | 1,67 | 2 |

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| 9 | 9 | <ul style="list-style-type: none"> SW Implementation. Theory & Practice. | | X | Lab | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> Practice Description. Subject Slides. - Study and personal work. | 1,67 | 2 |
| 10 | 10 | <ul style="list-style-type: none"> SW Implementation. Theory & Practice. | | X | Lab | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> Practice Description. Subject Slides. - Study and personal work. | 1,67 | 2 |
| 11 | 11 | <ul style="list-style-type: none"> Model-Based Design for Airborne SW. MBD for SW Practice. SW for Airborne Human-Machine Interfaces. SW for Airborne Human-Machine Interfaces Practice. | X | X | Lab | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> Practice Description. Subject Slides. - Study and personal work. | 1,67 | 2 |
| 12 | 12 | <ul style="list-style-type: none"> SW Verification. | X | | | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> Practice Description. Subject Slides. - Study and personal work. | 1,67 | 2 |
| 13 | 13 | <ul style="list-style-type: none"> Airborne SW Verification Practice I. | | X | Lab | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> Practice Description. Subject Slides. - Study and personal work. | 1,67 | 2 |
| 14 | 14 | <ul style="list-style-type: none"> Airborne SW Verification Practice II. | | X | Lab | No | <ul style="list-style-type: none"> - Reading the reference material: <ul style="list-style-type: none"> Practice Description. Subject Slides. - Study and personal work. | 1,67 | 2 |
| Subtotal 1 | | | | | | | | 23,38 | 28 |
| Total 1 (<i>Hours of class plus student homework hours between weeks 1-7</i>) | | | | | | | | 51,38 | |

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| 8 | | Tutorials, handing in, etc | | | | | | | |
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| 9 | | | | | | | | | |
| 10 | | Assessment | | | | | | | |
| 11 | | | | | | | | | |
| | | | | | | | | Subtotal 2 | |
| | | | | | | | | 3 | 21 |
| | | | | | | | | Total 2 (Hours of class plus student homework hours between weeks 8-11) | |
| | | | | | | | | 24 | |

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| TOTAL (Total 1 + Total 2. <u>Maximum 90 horas</u>) | | | | | | | | | |
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() In EPS are given an additional 6 hours of completary teaching along two sessions.*