



Discipline(s) : Informatique et télécommunications

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# MOTION FOR ANIMATION AND ROBOTICS

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**Nature**

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## RESPONSABLES

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Marc Christie

## OBJECTIFS

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The objectives of this module are:

- to master the key representations of motion (animation curves, direct and inverse kinematics)
- to know how to model physical, dynamic and behavioral animation, together with related computational techniques
- to know how to model environments and use planning algorithms in such environments

The module will rely on applications to illustrate different these techniques in robotics and animation

- pose retargeting (inverse kinematics, with/without dynamics)
- motion graphs (distance metrics between poses, motion similarity, motion interpolation)

## KEYWORDS

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## PREREQUISITES

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Aucun

## CONTENTS

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- Interpolation techniques for positions and orientations
- Inverse and direct kinematics
- Physical models for animation
- Motion capture and motion imitation
- Representations and algorithms for navigation
- Planning trajectories and planning tasks
- Behavioral animation

## APPARTIENT À

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Master 2 informatique parcours Science Informatique

## CONTACT(S)

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